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AL RESOURCES AND CONSERVATION
PROJECT EVALUATIONS AND RECOMMENDATIONS FOR 1996-1997
BIENNIUM AND STATUS REPORT FOR 1994-1995 BIENNIUM

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RENEWABLE RESOURCE GRANT AND LOAN PROGRAM

Project Evaluations and Recommendations
for the
1996-97 Biennium

and

1994-95 Biennium Status Report

Prepared by the

MONTANA
DEPARTMENT OF NATURAL RESOURCES
AND CONSERVATION

January 1995

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INTRODUCTION

The state of Montana's public policy is to promote the conservation, development, and beneficial use of the state's water and other renewable natural resources to secure maximum economic and social prosperity for its citizens. The Department of Natural Resources and Conservation (DNRC) provides the coordination necessary to administer Renewable Resource Grant and Loan Program, as described in Title 85, Montana Code Annotated (MCA).

The Renewable Resource Grant and Loan Program replaces the former Title 85, MCA Water Development Program and the Title 90, MCA Renewable Resource Development Program. The current program offers funding for projects that encompass all renewable resources. Governmental entities may apply to the program to obtain funding for community resource-related projects. Resource-related projects that conserve, manage, develop, or initiate the beneficial use of a renewable resource are eligible. Past projects have included water and sewer systems, irrigation system rehabilitation, re-forestation, urban forestry, erosion control, recreation access, and groundwater assessment projects. Applications are due May 15 of each even numbered year. DNRC staff reviews and ranks proposals from public entities and then presents a list of projects recommended for funding to the legislature during the next regular legislative session. Recommendations for the 1995 legislative session are contained in this report.

DNRC has worked with the Department of Health and Environmental Sciences and the Department of Commerce to make the application for state grant funding less confusing for Montana communities. All three agencies fund or otherwise invest in projects that involve community infrastructure and/or water resources. Applications submitted to several programs for the same project are jointly reviewed to ensure the best mix of funds from available sources of state and state administered federal funding. The joint review of applications also guards against funding a single project twice.

Private entities are also eligible for both grant and loan funding under the Renewable Resource Grant and Loan program. Montana's constitution prohibits the legislature from appropriating funds directly to private entities. Therefore, selection of projects occurs under a different process that involves review by DNRC staff and final approval by DNRC's director. Loan applications from private entities may be submitted anytime during the biennium. Applications for grants may be submitted only when they are solicited by DNRC. Private grants are only provided for projects that offer the greatest public benefit.

CHAPTER 1

THE RENEWABLE RESOURCE GRANT AND LOAN PROGRAM

Background

The Montana Legislature established the former Renewable Resource Development Program in 1975 to promote the development of our renewable resources. Funds generated by the use of depletable mineral resources were pledged toward the development of more sustainable resource-based industries. To do this, the program provided funds for eligible renewable resource development projects. Only governmental entities were eligible to apply for funding, however. Funds were provided for the purchase, lease, planning, design, construction, or rehabilitation of projects that conserved, managed, used, developed, or preserved land, water, fish, wildlife, recreation, and other renewable natural resources.

The former Water Development Program was established by the Montana Legislature in 1981 to promote and advance the beneficial use of water, and to allow Montana's citizens full use of the state's water by providing grants and loans for water development projects and activities. Under the Water Development Program, both governmental entities and private persons were eligible to apply for funding.

Allocations of the Resource Indemnity Trust Fund interest earnings provided the majority of the revenue deposited into the Water Development State Special Revenue Account and the Renewable Resource Development State Special Revenue Account. Other revenues include excess funds transferred from debt service accounts and fees collected from state water projects. The legislature appropriated funds from these state special revenue accounts for several programs and projects in various state agencies. In the past, only excess revenue beyond that needed to fully fund these state agency programs and projects has been available for funding grants. As more programs were added and more costs in each program were realized, funds available for grants under both the Water Development and Renewable Resource Development programs dwindled from $3.5 million in 1985 to only $1.7 million in 1991.

In 1993, House Bill 608 was passed by the legislature to turn-back the decline in available grant funding and to combine the Water Development and Renewable Resource Development programs. Changes in the law provide a minimum of $2.0 million for Renewable Resource Grant and Loan program public and private grants each biennium. With this action, the 53rd Legislature re-confirmed Montana's commitment to promote the conservation, development, and beneficial use of the state's water and other renewable natural resources. Combining the two programs streamlined program administration but did not change applicant and project eligibility criteria. In House Bill 608, the legislature reiterated that "in order that the people of Montana may enjoy the benefits of the state's water and other renewable resources, the state must establish this long-term renewable resource grant and loan program providing financial and administrative assistance to private for profit, private non-profit, local government, and state government entities for renewable resource grant and loan projects."

The Water Storage Account, designated by the legislature in 1991, continues to be a priority. In 1993, $250,000 was allocated to the Water Storage Account. Effective July 1, 1995, the allocation to that account will increase to $500,000 each biennium. Projects that promote the water storage priorities established by the State Water Plan may be funded with Water Storage Account funds. Other water storage projects may also compete for Renewable Resource Grant and Loan program funds. Statute that designated water storage projects as priorities under the former Water Development Program no longer exists. Water storage projects will be evaluated and ranked under the Renewable Resource Grant and Loan program according to standard ranking criteria.

Purpose

The purpose of the Renewable Resource Grant and Loan program is to further the state's policies, set forth in Section 85-1-101, MCA regarding the conservation, development, and beneficial use of water resources and to invest in renewable natural resource projects that will preserve for the citizens of Montana the economic and other benefits of the state's natural heritage.

Project Eligibility

Water and other renewable resource-related projects are eligible to receive grant and loan funding. Applications must document how the funds spent will enhance the common well-being of Montanans through measurable conservation and the management, better use, development, or protection of a targeted resource.

Governmental Entities:

According to statute, grants and loans for state and local government assistance may be made: to implement projects that enhance renewable resources in the state through conservation, development, management, or preservation; to assess the feasibility of or to plan such projects; and to achieve similar purposes approved by the legislature. In addition to those grants and loans approved by the legislature, DNRC may also provide grant funds to governmental entities to resolve water-related emergencies. Statute allows DNRC to request up to 10 percent of the funds available for grants in a biennium to use for emergency grants. Emergency funds may be granted to pay for projects which if delayed until the next regular legislative session would result in substantial damages or legal liability.

Requests for emergency funds are reviewed by DNRC staff. Funding recommendations are presented to DNRC's director. Chapter 5 of this report provides information about the applications for emergency assistance received in 1993 and 1994. Other applications for state and local government assistance are reviewed, and funding recommendations are made to the legislature each regular legislative session. The legislature makes individual appropriations to fund projects and stipulates any conditions for funding. Projects are then administered according to the conditions set by law.

During review of state and local government applications for Renewable Resource Grant and Loan program funding, reviewers may recommend that grants and/or loans be awarded to a department, agency, board, commission, or other division of state government, or to a city, county, or other political subdivision or local government body of the state. These entities, called "governmental entities", in the past have included: cities, counties, towns, water districts, sewer districts, conservation districts, irrigation districts, joint boards of control, state agencies, universities, and school districts.

Grants and loans may be made to governmental entities for the purchase, lease, or construction of projects for the conservation, management, use, development, or preservation of the state's water, land, vegetation, fish, wildlife, recreation, and other renewable resources. In the past, eligible projects have included those that, for example, provided research and demonstration of farming practices that reduced agricultural chemical use, improved forest resources, or allowed for better access to recreation opportunities. Other eligible projects have included feasibility and design studies for such projects, and development plans for the rehabilitation, expansion, or modification of existing projects.

Eligible water-related, renewable resource projects include projects to construct or repair "works" for the purpose of irrigation, flood prevention, drainage, or the supply of water for public, domestic, industrial, stock, fire protection, or other beneficial uses. Other eligible projects include those for the protection or benefit of fish and wildlife; improvement of public, water-based recreation opportunities; and development of hydropower. All means of conserving and

distributing water, such as reservoirs, dams, diversion canals, waste canals, drainage canals, dikes, lateral ditches and pumping units, mains, pipelines, and waterworks systems for the conservation, storage, distribution, and use of water are considered "works" and qualify for funding consideration.

Watershed projects that protect and improve water quality, like erosion control projects, and projects that help plan for the future management and protection of water sources, like groundwater assessment studies, have been funded. Chapters 6 and 7 of this report provide more examples of previous public grant and loan projects funded by the legislature. Applications from governmental entities that are less likely to receive funding include proposals for municipal swimming pools and golf course developments, playground equipment, or development of recreational areas for limited public use.

Loans to governmental entities must be secured with the borrower's bond. Loans will only be made to applicants that are structured to incur debt, have the capacity to incur additional debt and are willing to enter into a bond purchase agreement with the state.

Private Entities:

Applications from any individual, association, partnership, for profit corporation, or not for profit corporation, may be considered for funding, for water-related projects. These entities, called private entities are eligible for private grants and loans.

Funding for private grant projects is limited. In 1993, the legislature appropriated $100,000 for grants to private entities. By law, grant funding for a single project may not exceed 25 percent of the total estimated cost.[1] Statute provides that grants and loans may be made to private entities for water-related projects that conserve, manage, use, develop, or preserve the state's water. Only water-related projects may be funded. They must have quantifiable benefits that will exceed costs. Projects must also provide public benefits in addition to any private benefits. Applicants must hold or be able to acquire all necessary lands other than public lands and interests in the lands and water rights necessary for the construction, operation, and maintenance of the project.

Private grant and loan applications are managed under a process separate from state and local government entities. Montana's constitution prohibits the legislature from appropriating funds to a private entity directly. Therefore, funds appropriated by the legislature are used to issue individual awards to private grantees. Criteria for the award of funds to private entities are specified in the law. Each application is reviewed and, based on statutory criteria, funding recommendations are made to DNRC's Director. Final funding approval is made by the Director.

Irrigation system improvement projects, like the conversion from flood irrigation to sprinkler irrigation, are the most common type of projects funded through private loans. Projects to convert to gravity flow irrigation systems are another typical project. Loans have also been provided for the development and improvement of rural water supply systems. Chapter 4 of this report provides more examples of previously funded private loan projects. Private loans must be secured with real property. Projects that are not water-related or that are unable to provide real property to secure a loan have not been funded. Irrigation water users associations have applied for loans in the past but have not qualified for funding because the association had no common property that could be offered as security.

Loans will only be made to private applicants that are credit worthy and that are able and willing to enter into a contract for loan repayment.

[1] Feasibility studies, research, and/or public information projects are not eligible.

Funding Limitations

The law does not impose specific limitations on the amount of grant funding that may be provided by legislative appropriation for water and renewable resource projects proposed by governmental entities. Loans made from the Renewable Resource Loan Proceeds Account for water or other renewable resource related projects must not exceed $200,000. Coal Severance Tax loans are limited only by the state's bonding capacity. In 1993 loans were awarded in amounts as large as $4.8 million. Coal Severance Tax loans, however, must be for water-related projects only.

There are no legal limits restricting the amount of grant money that can be awarded to fund a state or local government project. Grant recommendations presented to the Long Range Planning Sub-Committee by DNRC are for limited amounts. These limits are consistent with limits imposed by the legislature in the past and have been imposed to obtain optimal public benefit from the investment of public funds. Guidelines used to develop funding recommendations have been developed with input from the Long Range Planning Sub-Committee and from the former Water Development Advisory Council. Proposed funding levels do not constrain the legislature's ability to appropriate grants and loans in amounts deemed appropriate based on testimony presented in legislative hearings and consistent with current legislative priorities.

Grants to private entities are limited by law to 25 percent of the project cost. Loans to private entities may not exceed the lesser of $200,000 or 80 percent of the fair market value of the security given for the project.

Funding Authority:

House Bill 608, effective July 1, 1995, restructured the allocation of Resource Indemnity Trust (RIT) proceeds and interest to provide a minimum of $2.0 million for grants under the program each biennium. Figure 1.1 shows the allocation formula. The formula allocates 10 percent of RIT tax proceeds to the Renewable Resource Grant and Loan program. It also shows that 45.9 percent goes to the RIT Trust, 14.1 percent goes to Groundwater Assessment, and the balance, 30 percent, goes to the Reclamation and Development Grants Program.

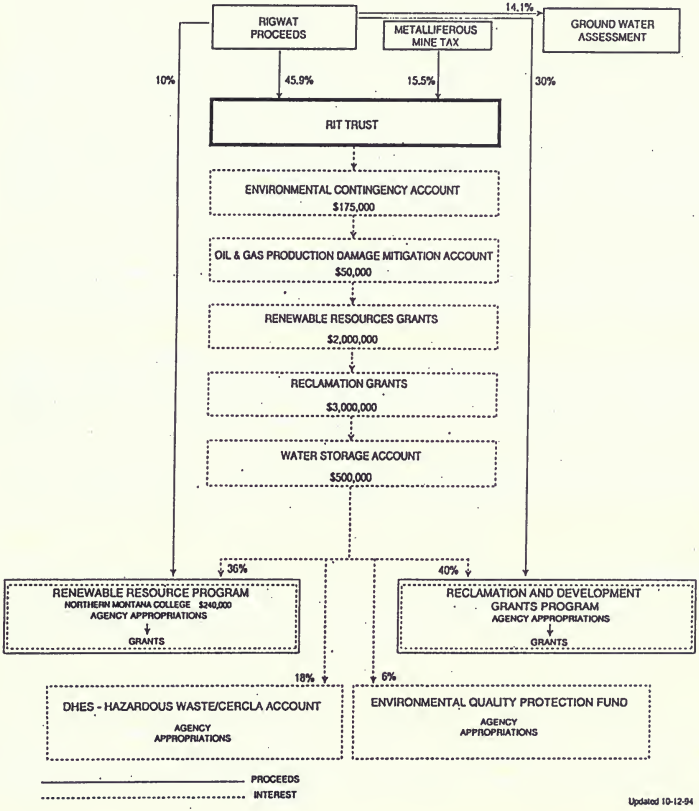
As shown in Figure 1.1, a portion of the interest earned on the investment of RIT Trust funds is allocated by the legislature to each of six priorities, including: (1) the Environmental Contingency Account ($175,000), (2) the Oil & Gas Production Damage Mitigation Account ($50,000), (3) Northern Montana College ($240,000), (4) Renewable Resource Grants ($2.0 million), (5) Reclamation and Development Grants ($3.0 million) and, (6) the Water Storage Account ($500,000). Thus, a minimum of $2.0 million will be available to fund the Renewable Resource grants authorized by the 1995 Legislature. After the allocation of funds to the six priorities indicated, the remaining interest earnings are distributed proportionately to four state special revenue accounts: (1) the Renewable Resource Grant and Loan Program account (36 percent), (2) the Reclamation and Development Grants Program account (40 percent), (3) the Hazardous Waste/CERCLA account (18 percent) and, (4) the Environmental Quality Protection Fund State Special Revenue account (6 percent). Any funds in excess of agency appropriations or that remain in the Renewable Resource or the Reclamation special revenue accounts at the end of the biennium, are appropriated for grants under each program, respectively.

To finance loans the law provides authority to issue general obligation Renewable Resource bonds totaling $10 million; about $8.8 million of general obligation bonds have been issued to date. Authority to issue Coal Severance Tax (CST) bonds of $250 million is also provided by law. Because CST bonds represent only a limited obligation of the state, a more limiting constraint was adopted by a general resolution of the Board of Examiners. As a result, the authority to issue CST bonds is constrained by the tax proceeds flowing into the fund and the amount of debt to be paid on those CST bonds. Approximately $30 million remains in CST bond authority.

Figure 1.1

ALLOCATION OF RIT PROCEEDS AND INTEREST

1997 Biennium



Program Implementation

General provisions of Title 85, MCA dictate that the state, acting through the DNRC, coordinate the development and use of the water resources of the state so as to effect full utilization, conservation, and protection of its water resources. In 1993, the Renewable Resource Development Program was combined with the Title 85 Water Development Program and DNRC's role under Title 85 was extended to provide for DNRC's continuing coordination of the development of the state's renewable resources to preserve for Montanans the economic and other benefits of the state's natural heritage. The Resource Development Bureau of the DNRC thus assumed the responsibility of administering the Renewable Resource Grant and Loan program as stipulated under Part 6, Title 85, MCA.

Part 6 of Title 85 specifies DNRC's role in the management of the Renewable Resource Grant and Loan program. In the management of grants and loans and the sale of bonds for state and local government assistance, Title 85-1-605, MCA allows DNRC to make project funding recommendations only. The legislature approves by appropriation the actual awards of those grants and loans to governmental entities that it finds consistent with the policies and purposes of the program. In presenting recommendations to the legislature, DNRC provides information about each project for legislative consideration. All public grant projects are ranked by DNRC to show the legislature the potential value of one project compared to all of the other grant projects requesting funds. Grant projects that do not meet minimum technical standards are not recommended by DNRC for funding. All recommendations made by DNRC may be rejected by the legislature in favor of other considerations that it holds as higher priority. Once the legislature makes an award, DNRC manages the authorized grants and loans according to conditions set out in the legislative appropriations bill.

Acting within the limits of the authority provided by statute, DNRC provides the staffing necessary to enable the legislature to govern state and local government assistance rendered under the Renewable Resource Grant and Loan program. Each legislative session members, of the Long Range Planning Subcommittee review the funding recommendations provided by DNRC. In response, the committee provides DNRC direction for the future.

Statute clearly prescribes DNRC's role in the administration of grants and loans to private entities. Statute included in Title 85-1-606 through 614, MCA is specific with respect to the parameters for the award of these funds. DNRC is directed to publicize statutes and rules governing these grants and loans and to set application deadlines. Only water-related projects are eligible. Additional eligibility criteria and the criteria and preferences to be used in evaluation are set out in Title 85-1-609 and 610, MCA.

Based on the direction provided by the legislature and in response to statute, DNRC has compiled guidelines for the administration of the program. This report presents these guidelines for further review by the legislature.

Rulemaking Authority:

Montana's Constitution prohibits DNRC from "exercising the power properly belonging to the legislature" (Article III, section 1, Montana Constitution). Rulemaking authority specified by Title 85-1-612, MCA prescribes the extent of the power delegated from the legislature to DNRC for the administration of the Renewable Resource Grant and Loan program. DNRC's role in administrating the Renewable Resource Grant and Loan program is limited to a coordinating role. In other words, applications for funding are submitted to DNRC, DNRC then prepares recommendations, and together with the applicants presents proposals to the legislature or DNRC's director. Except in emergencies, the legislature considers applications for state and local government assistance during each regular legislative session and awards funds in light of legislative priorities unconstrained by statute or DNRC's recommendations. DNRC's director reviews emergency requests and staff recommendations to ensure that proposed emergency awards are consistent with statute. Applications submitted by private entities are also reviewed by DNRC's director to ensure that awards are consistent with statute.

To fulfill its coordination role, Title 85, MCA directs DNRC to adopt rules to: (1) prescribe the application fee and content for grant and loan applications, (2) describe the ranking criteria used when making funding recommendations to evaluate and prioritize public grant applications, (3) govern the process for awarding grants and loans to private entities according to statutory criteria, (4) provide for the servicing of loans and, (5) describe the terms and conditions for making grants and loans, and the security instruments and agreements necessary.

Limited by its authority to adopt rules, DNRC is not able to expand or limit the mission of the Renewable Resource Grant and Loan program beyond legislative intent. The authority to limit the amount of public grants or to narrow the range of eligible grants based on DNRC priorities, for example, is not provided. DNRC adopted rules for the Renewable Resource Grant and Loan program in 1993. New rules were adopted to respond to changes in statute that resulted when the former Water Development and Renewable Resource Development programs were combined.

Mission:

DNRC administers the Renewable Resource Grant and Loan program to respond to the general provisions of Title 85, MCA. Part 1 of Title 85, MCA states that the public policy of the state is to promote the conservation, development, and beneficial use of the state's water resources to secure the maximum economic and social prosperity for its citizens. According to Title 85, MCA, Part 1 the development and utilization and the efficient, economic distribution of water resources are vital to protect existing uses and to assure adequate future water supplies for public recreational purposes and for the conservation of wildlife and aquatic life. Furthermore, Title 85, MCA, Part 1 states that public interest requires the construction, operation, and maintenance of systems for the conservation, development, storage, distribution, and utilization of water for the welfare and benefit of the people of the state. Title 85, MCA Part 1, states that the greatest economic benefit to the people of Montana can be secured only by the sound coordination of development and utilization of water resources with the development and utilization of all other resources of the state.

Part 6 of Title 85, MCA provides grant and loan funding for projects that support Part 1 and that develop other renewable natural resources. The law states that the purpose of the Renewable Resource Grant and Loan program is: (1) to further the state's policies as outlined in Part 1 regarding the conservation, development, and beneficial use of water resources and; (2) to invest in renewable natural resource projects that will preserve for the citizens of Montana the economic and other benefits of the state's natural heritage. According to Part 6, the development of renewable resource projects will continue to provide tax and other revenue and will preserve for the citizens the economic and other benefits of the state's natural heritage. To a large extent the state's present and future economy is based either directly or indirectly on the wise use of water and other renewable resources. Therefore, DNRC considers the conservation, development, management, and preservation of water and other renewable resources a high priority.

With respect to the Renewable Resource Grant and Loan program, DNRC's mission is to promote grant and loan funding for resource development projects proposed by private and governmental entities that will best support the purposes and stipulations of Part 1 and Part 6 of Title 85, MCA and to administer those projects selected for funding according to applicable laws and any conditions imposed by the legislature.

Goals:

DNRC's goals for administering the Renewable Resource Grant and Loan program relate to the solicitation of applications, the evaluation of applications to provide the legislature with a basis for the selection of projects that best support the purposes and stipulations of Title 85, MCA and the administration of grants and loans to comply with the conditions of the authorization and applicable laws.

DNRC seeks to:

(1) Inform the public of the benefits provided though the Renewable Resource Grant and Loan program through direct mail, news articles, press releases, and the legislative process.

(2) Solicit public comment and suggestions for improvements to the program through the administrative rulemaking and legislative process, during the solicitation for grant applications, and review of projects for funding.

(3) Coordinate with other state and federal government agencies to provide information about government funding sources for water and other renewable resource projects, to facilitate a uniform application process, and to award funds without duplication.

(4) Inform the public and private sectors that grant and loan funding for water and other renewable resource projects is available, that certain applicant eligibility criteria for obtaining funds exist, and that projects that meet the purposes of Title 85, MCA qualify for funding. To promote the program, DNRC provides specific information:

   a. about the grant and loan program to state and local government entities that are most likely to sponsor projects eligible for funding so as to obtain a large number of applications varied in applicant and project type. Information is provided through press releases, news articles, brochures mailed directly to potential applicants, and at workshops held in communities across the state.

   b. to targeted private entities to obtain applications for grant funds that will result in significant public benefit. Information is provided through press releases, news articles, and direct contact.

   c. to private entities qualified to borrow money. Information is provided through press releases, news articles, and direct contact.

(5) Gather input and evaluate applications to assess the technical, financial, economic, and environmental feasibility of each project application and to compare grant projects based on the merits of feasibility and the benefits set out by Title 85, MCA to provide an objective assessment for funding consideration.

(6) Effectively administer grants and loans to ensure that funds are used for allowable costs and that projects are executed in accordance with any conditions set by the legislature and in compliance with Title 85, MCA and other applicable laws without undue burden to the recipient.

(7) Offer loans at the most affordable rates obtainable through the sale of public bonds.

(8) Adequately secure loans to protect the investment of public funds.

(9) Advise the legislature concerning DNRC's efforts to effectively administer the program according to statute and legislative intent.

Staffing

The Renewable Resource Grant and Loan program lost staff in 1991 and now employs only the equivalent of five full-time staff positions to administer active grants to governmental entities in excess of $4.0 million, including grants that were authorized by the legislature as long ago as 1985. Grant awards in the 1993 legislative session averaged $59,000; it is likely that 34 projects will receive funding in the 1995 biennium. Outstanding loans to governmental entities total over $89 million and include projects under construction and those in repayment status. Terms for these loans are

generally 20 years; the current trend is to add 12 to 20 loans each biennium. Private loans totalling over $7.0 million have been issued; the outstanding balance of these loans is less than $4.0 million. These five positions manage over 200 grants and loans totaling more than $100 million.

In addition to administering existing projects, Renewable Resource Grant and Loan program staff provide the manpower to promote the applications process and critically review 30 to 40 new proposals each biennium. Administrative staff works with bond council and a team of financial advisors to sell the bonds needed to finance new loans and to refinance existing loans at lower interest rates when the opportunity exists. Staffing and other funding constraints do limit DNRC's abilities to monitor projects on site, provide technical assistance, evaluate project benefits, and provide public information.

CHAPTER 2

RENEWABLE RESOURCE GRANTS AND LOANS UNDER $200,000 TO PUBLIC ENTITIES

Application Administration and Project Review Procedures

Applications for public grant and loans are accepted by the DNRC's Resource Development Bureau until May 15 of each even numbered year. In 1994, because May 15 was a Sunday and to be consistent with public law, applications submitted or postmarked by May 16 were accepted. A $250 application fee is generally required with each application. The exception is made for organizations that also provide voluntary expert review of DNRC grant applications. Those state agencies and units of the university system or other organizations that contribute to DNRC's extensive grant review process may request and then would receive an application fee waiver.

Project Solicitation:

Project applications are solicited broadly because DNRC seeks to maintain the competitive nature of the program. Limited funding means, when a large number of applications are submitted, only the highest ranked projects receive funding. Those that most closely meet statutory priorities rank most highly and receive DNRC's funding recommendation. Projects that do not rank competitively fall below the projected funding line and are less likely to receive legislative approval.

An extensive mailing list is used to promote the program and to solicit applications from those eligible to apply. Those on the list represent both state and local government entities and private concerns. Mailing lists were originally obtained from divisions within DNRC and other state agencies. Lists were combined and duplicate addresses were removed. Included are contacts from the university system, agencies of state government, cities, towns, environmental organizations, water users associations, irrigation districts, water and sewer districts, native .american leaders, conservation districts and agencies of federal government. Individuals and organizations are included in each category. For example, agriculture interests contains 37 associations, producers and county extension agents.

To begin promotion for the 1995 application cycle, mailback cards were sent to all listees in June 1993. Mailback cards announced that the former Water Development and Renewable Resource Development programs were combined by statute and that a minimum funding level of $2.0 million was set for the 1995 grant cycle. Mailback cards were used to cull the mailing list. Those entities that no longer wished to receive program information were removed from the list. Engineering firms were added to the list for a total of 775 listed entities; conservation districts and legislators were dropped from the list in favor of individual lists regularly maintained.

To solicit applications each cycle, brochures are sent to those on the mailing list. These announce the next application deadline and provide basic information about the availability of grant and loan funds. Brochures were sent in February 1994 to promote the 1995 cycle. The brochure, with a tear-off form, provided an opportunity to request application forms and guidelines for the 1995 cycle.

More detailed program bulletins that describe the Renewable Resource Grant and Loan Program are sent to cities, counties, districts, associations, and organizations potentially interested in program grant or loan funding to promote the upcoming funding cycle. These provide an update of the projects recently funded and detailed information about applicant

and project eligibility. They explain the application process and the process for application review.

Press releases are issued to announce the next application deadline to those not on the current mailing list. Press releases were sent to all Montana daily newspapers January 21, 1994 and began to appear on January 26. Press releases provide general program information, a telephone number and address to request more information, application forms and guidelines.

In addition to direct mail and media announcements, DNRC combines forces with other state agencies to meet locally with potential applicants. Besides the Renewable Resource Grant and Loan program, information about the federally funded Community Development Block Grant program, the State Revolving Fund, the Reclamation and Development Grant program, and the Treasure State Endowment program is presented at these seminars for a "one-stop shopping" approach to Montana's state and local government financial assistance programs.

In 1994, 118 grant and loan applications were mailed to potential applicants; these were in addition to the applications distributed at financial assistance seminars. Forty grant applications were returned to DNRC to request $3.5 million in grant funding. Two applicants also requested a combined total of $695,000 in loan funds. The number of applications submitted and the amount of grant funding requested was down from the 1993 cycle.

The decline in number of applications may be due to several factors. The Renewable Resource Development program provides funds for some of the same purposes allowed under the Treasure State Endowment Program, established by statute in 1991; in 1993 the legislature allowed funding for projects under only one of the two programs. Therefore, in 1995 some applicants are seeking funds only from the program where they feel they will most competitive.

Another factor may be the change in application deadlines. Application deadlines for the Department of Commerce's Community Development Block Grant and Treasure State Endowment programs changed in 1994; applications for these programs are now due about the time applications are due for the Renewable Resource Grant and Loan program. Some potential applicants likely were not able to complete applications for all programs within the application window.

The decline in the availability of matching funds is another factor. Because there has been a decline in the availability of federal matching funds for irrigation water conservation efforts these potential applicants are unable to assemble a funding package to make their project financially feasible.

Finally, the increased complexity of DNRC's application may have been a deterrent to potential applicants. DNRC's application guidelines and forms were revised prior to the 1995 application cycle. The grant and loan applications were combined to require only one application form. Other changes were made in response to comments and suggestions from members of the Long Range Planning Subcommittee and the Legislative Auditor's staff. Specifically, in response to the Subcommittee the application now requires municipal governments to submit detailed financial information consistent with Department of Commerce's Community Development Block Grant and Treasure State Endowment Program applications.

Revisions based on comments from the Legislative Auditor's staff resulted in changes through-out the application. Changes were required to more specifically detail the information demanded from applicants to parallel the "Guidelines for Application Review". The change was made to shift burden from the reviewer to the applicant. It was to reduce the amount of additional application information requested from applicants by key reviewers following initial application review. Whereas the 1993 cycle application booklet was only 34 pages, the 1995 cycle application booklet became a 60 page document as a result of the changes made.

Information requested in the 1995 cycle application included:

- A proposal abstract describing the project's merits.
- Project data describing the applicant and the propose funding structure.

- A technical narrative to describe the proposal's purpose, the project history and a description of prior efforts, the specific objectives to be achieved and how the project will achieve the stated objectives, alternatives considered and the reason the proposed alternative was selected, and a detailed project description to explain how the proposed alternative will achieve the objectives stated.
- Technical documentation to support the technical narrative.
- A financial narrative and budget forms describing the funding structure that will be used to ensure adequate sources of funds to complete the project including grants, loans, matching dollars and in-kind contributions.
- For municipal and irrigation projects, affordability data to be used to compare the local financial commitment and ability to pay with other applicants for municipal or irrigation projects.
- Financial documentation showing commitments from other funding agencies.
- An economic feasibility narrative to compare the anticipated project benefits with total project costs.
- A discussion of the public benefits outlined in statute that will be achieved through the project proposed.
- Information about the need for and urgency of the project to overcome health and human safety concerns.
- A checklist to assess the extent of the adverse environmental impacts likely to occur as a result of the project.

Due to the decline in the number of applications submitted, DNRC plans to reassess the application process to increase the number of applications submitted and thus preserve the competitive nature of the program.

Application Review:

All applications received by the deadline are evaluated for completeness. Those missing documentation, application fees, or other basic requirements are notified and provided time to submit additional material. After applications are reviewed for completeness, and any additional information needed is obtained from the sponsor, completed applications are given to a team of key reviewers for evaluation. Figure 2.1, prepared by the Legislative Auditor's staff, shows the flow of the grant application review and ranking process.

To review applications for the 1995 cycle, DNRC assembled a technical review team of eight key reviewers. Key reviewers include staff from other divisions within DNRC and contracted private engineering firms. On average, each key reviewer was asked to coordinate the review of five projects. Projects are assigned to reviewers based on the reviewer's area of expertise. Key reviewers are given information about the program, all application material information received by DNRC, standard scoring instructions, and "Guidelines for Reviewing Applications".

DNRC's technical review team evaluates each application to ensure that the proposal is economically feasible, that it is to be located in Montana, and that the project will be at least technically feasible. Economic feasibility is judged to verify that the anticipated benefits directly attributable to a project will exceed all associated costs. During the technical review, additional detailed technical information may be requested if needed.

For each project the potential for adverse environmental impact is evaluated by a member of DNRC's Environmental Impact Study team in compliance with the Montana Environmental Policy Act. Projects that would result in significant adverse impacts would not be recommended for funding by DNRC until an environmental assessment or environmental impact study has been accomplished. Recommendations are made to minimize impacts and to ensure that appropriate steps are taken to protect the environment.

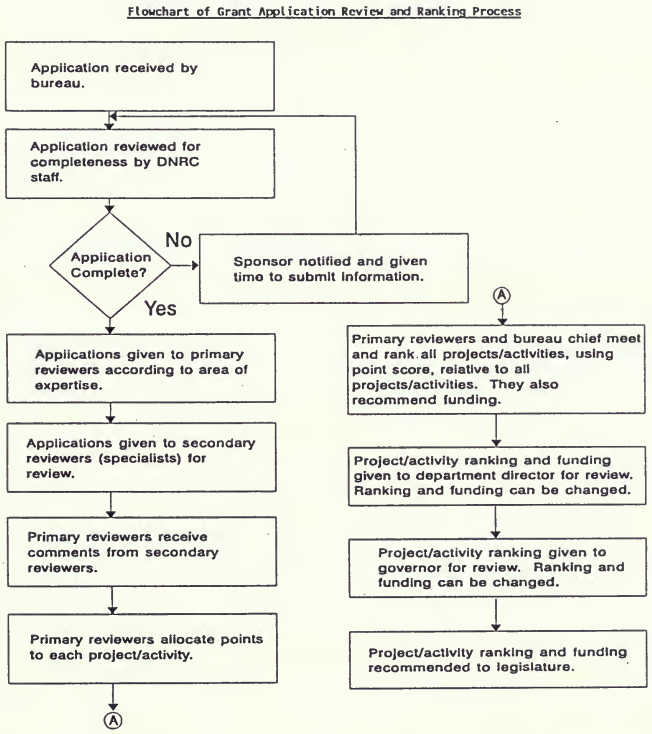
The Renewable Resource Grant and Loan program by statute is directed to implement priorities of the State Water Plan. Each project is reviewed by an water planning expert to assess the degree to which it will implement a priority of the State Water Plan. Projects that will implement a priority of the State Water Plan are awarded more ranking points and are likely to rank higher than projects that do not implement State Water Plan priorities.

State law requires DNRC to solicit views of interested and affected parties, including local, state, and federal agencies, concerning projects submitted for grant and loan funding. This is accomplished through the review of applications. Each

key reviewer requests the voluntary services of one or more other expert reviewers for each project. State agencies, federal agencies, environmental groups, private organizations, and universities provide experts to perform the technical review of applications. Key reviewers use the "Guidelines for Application Review" to provide a consistent basis for expert review of the technical and financial aspects of applications. In 1992, press releases were issued in Montana's daily and weekly newspapers to also inform the general public of the projects seeking funding under the Renewable Resource Grant and Loan program. The only comment received was from a state agency; press releases were not used in 1994.

With the results of own evaluation and comments from agency and outside experts, key reviewers assess and document the merits of each proposal based on standard review criteria outlined in the ranking form.

Figure 2.1


Flowchart of Grant Application Review and Ranking Process
Application received by bureau.
Application reviewed for completeness by DNRC staff.
Application Complete?
No
Sponsor notified and given time to submit information.
Yes
Applications given to primary reviewers according to area of expertise.
Applications given to secondary reviewers (specialists) for review.
Primary reviewers receive comments from secondary reviewers.
Primary reviewers allocate points to each project/activity.
A
A
Primary reviewers and bureau chief meet and rank all projects/activities, using point score, relative to all projects/activities. They also recommend funding.
Project/activity ranking and funding given to department director for review. Ranking and funding can be changed.
Project/activity ranking given to governor for review. Ranking and funding can be changed.
Project/activity ranking and funding recommended to legislature.

Source: Compiled by the Office of the Legislative Auditor from department records.

Grant Project Ranking

To obtain an objective evaluation of all applications, DNRC developed a standard ranking form containing review instructions and guidelines. Each key reviewer completes a ranking form for each application reviewed to document the merits of the proposal and the score that resulted.

Each key reviewer assigns a score to reflect project merit under the following four primary categories:

(1) FINANCIAL FEASIBILITY (-200 points). Key reviewers decide whether funds exist to construct, operate, continue, maintain, or complete a project and whether these are identified. They also determine whether other funding sources to complete the proposed project have been secured, whether documentation of these funds is provided, whether any necessary security required to support a loan requested in conjunction with the grant exists and is sufficient, and whether matching funds are in-kind contributions or another form of soft match.

If this review uncovers any deficiencies in a proposal's financial feasibility, points are deducted. An acceptable application loses no points, a marginal application would lose 100 points, and a doubtful application would lose the maximum of 200 points.

(2) ADVERSE ENVIRONMENTAL IMPACT (-300 points). Any adverse impacts in areas such as air quality, water quality, vegetation/wildlife, land use, and visual/aesthetics are identified with the assistance and guidance of DNRC's environmental impact team. If any adverse effects are likely to result from a project, preparation of an environmental assessment and, possibly, an environmental impact statement would be required to fulfill requirements of the Montana Environmental Policy Act. The cost of these documents will serve as a factor in reconsidering the initial cost and benefit assessment.

Adverse environmental impacts will be estimated and could result in a proposal's loss of a maximum of 300 points.

(3) TECHNICAL MERIT (400 points). Standard principles are used to evaluate a proposal's technical merit. Review must conclude that a project meets the standards necessary to comply with state law. Applicants also must either hold or indicate their ability to acquire all of the necessary land or water right interests. Proposals that use commonly accepted technology and are not experimental efforts will be more competitive than those that propose to use a more experimental type of technology to solve a common problem. Proposal budgets and timelines must be reasonable and well-documented. Up to 400 points will be awarded to an application under the technical merit category.

(4) PUBLIC BENEFIT (400 points). Public benefit criteria are based on Montana statutes. Up to 400 points will be awarded, depending on the degree to which these tests apply:

A. State Water Plan (150 points). To earn State Water Plan points the project must implement a priority of the State Water Plan.

B. Reserved Water Rights (50 points). Reserved water rights points are awarded to projects that initiate the use of water reserved under Montana law or, help resolve Indian/federal reserved water rights.

C. Resource conservation, management, or protection (100 points). Points are award for projects that will: significantly contribute toward resource conservation when implemented; invest in replacing nonrenewable

resources with renewable resources to provide benefits--economic or otherwise--for the state's citizens and to preserve its natural heritage; preserve resources such as land, air, water, wildlife, or recreation while developing economic resources; or, develop a renewable natural resource to provide future economic benefits to Montana.

D. Citizen benefits or support (100 points). Citizen benefit points are awarded if the project will be a multi-use project, used by the public, is strongly supported by documented citizen support, co-funded with non-state funding that exceeds the funding requested, or will provide a source of new, permanent jobs. Points may also be awarded for projects that provide benefits that are measurable, will be ongoing, will affect a large number of people in Montana, or, are significant when compared to benefits that other proposed projects would provide.

For the Renewable Resource Grant and Loan program, need and urgency are not identified by statute as public benefits. Projects that represent a solutions to serious health and human safety problems, in the absence of other compelling benefits, are not recommended for funding. On the other hand projects that receive high scores for the criteria outlined above and represent solutions to serious health and human safety problems may receive additional points to elevate the project's standing in the order of funding priority. Need and urgency are evaluated in the following manner:

(5) NEED (100 points). Points for public need will be awarded to proposals only if the subtotal of the previous categories is more than average. Points will be awarded to proposals that have not previously received funding from DNRC, that document no other available public funding, that show compliance with court orders to overcome identified health hazards, or that mitigate existing, adverse environmental conditions. Up to 100 points may be awarded to a proposal under the public need category.

(6) URGENCY (100 points). Urgency points will be awarded only to applicants that qualify for consideration under public need. Up to 100 points may be awarded to proposals that document severe financial need demonstrated by the rates and fees in place for related community systems or services, a high debt-to-bond capacity ratio or other fiscal problems, or a threat to life or property that would be imminent without the project.

After each key reviewer determines the score for assigned projects, all key reviewers, the bureau chief, environmental specialist and state water planning expert meet to discuss the projects and scores proposed. During this process the key reviewer gives a short presentation about each project reviewed and the score given. After all presentations, scores for each category on the scoring sheet are discussed. The team then decides the scores each project should receive in relation to all projects. Discussion by the team reduces inconsistencies between scores given by individual reviewers. Final team scores are recorded on a ranking spreadsheet used to document the ranking process.

DNRC's ranking system is used to determine the relative merit of every proposal submitted for grant funding. Ranking scores are used as a guide for the staff to select projects that seem to best serve the program's objectives as stipulated by statute, and to summarize information for DNRC's director. Proposal recommendations are presented to the governor for grant funding in the order they are ranked. Ranking scores are not binding. Either DNRC's director or the governor may make any adjustments to the recommendations prepared by DNRC deemed necessary to reflect their assessment of natural resource and other policy priorities. Based on the governor's priorities, an appropriations bill is drafted and introduced to the legislature. Actual funding decisions are made by the legislature. Not bound by DNRC's review criteria or the governor's final ranking, the legislature ultimately will authorize funding for the projects in the order of priority and in the amounts that it judges will best serve the state.

Funding Recommendations

As discussed in this report, DNRC's role is to review and screen grant requests to determine whether the proposed projects are both financially and technically feasible. All feasible grant requests are ranked according to standard criteria to select those that most efficiently use the state's natural resources in accordance with statutory guidelines. Then in

conjunction with its recommendation for funding priority, DNRC makes its recommendations concerning the amount of funding to be awarded each project.

With the governor's approval, final funding recommendations are presented to the legislature as part of this report. These recommendations do not impose any limit on the amount of funding the legislature may provide to any governmental entity for a single grant project.

Although grant funding for public projects is not limited by statute, in the past the legislature has limited its grant funding awards to a maximum of $100,000 per project. This policy represents their interest in providing funding for not just a few high-cost grants. Instead, grant limits were set to fund a larger number of grants that would cause the leveraging of more federal dollars and provide for a greater geographical distribution of grant funds.

General Recommendations:

To promote leveraging and to increase the targeted benefits achieved through expenditure of state grant dollars, Renewable Resource Grant and Loan program grants typically pay only a portion of a project's costs. To help meet a project's total cost, a grant may be paired with a low-interest Renewable Resource Grant and Loan program loan. By statute, the amount of a single loan financed with revenue from the sale of Renewable Resource bonds may not exceed $200,000. These loans may be used to fund either water-related or other renewable resource projects. Discussion here will be limited to loans within this $200,000 limit. Later in this report, larger loans, available for water-related projects only and funded with the proceeds of the sale of Coal Severance Tax bonds, will be discussed.

Although statute allows a loan up to $200,000, in practice loans offered in combination with grants have amounted to less than $200,000. Consistent with past legislative authorizations, DNRC's grant and loan recommendations cumulatively do not exceed $200,000 for a single project and funds from other sources often are needed. For example, if a $400,000 well drilling project receives a $50,000 grant and a $150,000 loan from DNRC's programs, an additional $200,000 would be needed from other local, state, or federal sources to meet the project's total cost.

The typical grant recommended by DNRC will be up to 25 percent of the total project cost, but no more than $50,000. The remainder of an applicant's funding request up to $200,000 will be provided in a loan if the project sponsor is able to repay the loan's principal and interest according to terms specified in a DNRC bond purchase agreement. For projects with no repayment revenue source, such as fees collected or taxes assessed, DNRC may recommend grant funding for up to 100 percent of the project cost, but not more than $100,000.

DNRC uses the foregoing guidelines as staff prepares funding recommendations. Though these guidelines are consistent with the actions taken by the legislature in the past, they do not constrain the legislature from authorizing grant and loan awards in combinations that total more than $200,000. As emphasized above, statute limits the amount of a single loan financed with revenue from the sale of Renewable Resource bonds to $200,000. The amount of grants that may offered in conjunction with these loans is not limited. The well drilling project in the example above could be funded with a $200,000 loan and a $200,000 grant under the Renewable Resource Grant and Loan program if the legislature authorized funding in those amounts.

After the subcommittee acts on DNRC's recommendations, the appropriations bill is amended and finally adopted through the legislative process. This bill authorizes individual grants and loans, stipulates funding amounts and any restrictions, and specifies the priority order for grants to be funded during the subsequent biennium as revenue is earned. DNRC is limited in its authority to administer grants by the decisions made by the legislature. Grants authorized by the legislature are administered by DNRC in accordance with the appropriations bill and consistent with contingencies adopted during subcommittee hearing.

Affordability Criteria:

The Department of Commerce's Treasure State Endowment Program for city and county infra-structure improvements, offers grants of much larger proportions than those typically awarded for similar projects under the Renewable Resource Grant and Loan program. Program statute directs the Department of Commerce to select projects with consideration given first to need and urgency. Thus, a method was crafted to analyze the debt structure and the ability of its applicants to pay for projects with community funds. This analysis is the basis for prioritizing projects and determining the recommendations for grant funding levels. The process is designed solely to evaluate the community's financial condition and does not weigh the value of the project compared to others in terms of its natural resource merit. Under the Treasure State Endowment Program a $500,000 limit for grants has been established. Funding is recommended in amounts necessary to ensure that debt load and the fee structure for municipal services is not a larger burden than a community can afford. In addition to the $500,000 cut, the maximum amount allowed is up to 75 percent of the total project cost.

During the 1993 legislative session, members of the Long Range Planning Subcommittee, impressed with financial assessments made by the Department of Commerce, requested DNRC inform them of each municipal applicant's relative ability to finance projects for which grant funds were requested. Members of the subcommittee understandably expressed an unwillingness to make Renewable Resource Grant and Loan program funding a priority for those communities with resources to otherwise pay for the a community water or sewer project. In a 1994 report, staff from the Legislative Auditor's Office noted, "If DNRC were to change funding policies, municipal entities with greater financial need could be granted additional grant dollars to ease the burden of repaying loans." The report directs DNRC to evaluate the dollar limits for grants and to make recommended changes, if any, to the Long Range Planning Subcommittee.

Both members of the Long Range Planning Subcommittee and the Legislative Auditor's staff, in view of the applications submitted by municipalities for community water and sewer projects, are inclined to weigh funding priorities and to make funding decisions based on financial need. DNRC finds the goals of the Renewable Resource Grant and Loan program, outlined in statute, do not provide for awards based primarily on community financial need. Financial need certainly must remain a factor in providing grant funds. The purpose of the Renewable Resource Grant and Loan program, however, is to further conservation, development, and beneficial use of water resources and to invest in renewable natural resource projects that will preserve the economic and other benefits of the state's natural heritage. The legislature has the opportunity to ensure that the funding structure used to award grants under the Renewable Resource Grant and Loan program provides the incentives needed to attract and promote projects that best support Montana's natural resource development priorities.

Past Renewable Resource Grant and Loan program awards authorized by the legislature have not reflected an inclination to provide assistance based primarily on financial need. Law makers have consistently authorized a large number of smaller, "incentive" grants to promote superior natural resource development decisions. There are several reasons that financial need has not been the factor used by the legislature in making grant awards under the program. The amount of money set aside for grants for the program is not adequate to meet the demand for funds to pay for resource-related projects in Montana. Incentive awards were offered to provide the match needed to obtain, in some cases, millions of dollars in matching funds. For example, under the U.S. Bureau of Reclamation's Rehabilitation and Betterment program for irrigation systems improvement, a $100,000 grant from the Renewable Resource Grant and Loan program was adequate to secure $1.0 million in matching funds. This type of project was ideal because in addition to securing millions of federal dollars, irrigation improvements offer significant opportunities for the conservation, development and beneficial use of water resources. Unfortunately, the U.S. Bureau of Reclamation no longer has funds for these projects. The number of applications for irrigation system improvement projects has declined with the loss of federal dollars.

Because it is not consistent with the goals of the program and priorities expressed by the legislature in statute, awarding grants in higher amounts to respond to the need for improved water and sewer systems in Montana's communities has not been recommended by DNRC. DNRC recognizes the inclination to respond to the demand for improvements in decaying community infrastructure facilities. However, based on the goals of the program, these projects are not those

that merit the greatest consideration. The number of community infrastructure project applications submitted under the Renewable Resource Grant and Loan program has increased in response to pressure created by the federal Clean Water Act. Communities in Montana, faced with meeting higher standards and when no other source of state funds was available to finance these improvements, turned to the Renewable Resource Grant and Loan program for funds to pay for new or improved community drinking water and waste processing systems. With the decline in other applications due to cuts in federal dollars and with the pressure to meet clean water standards, the number of community water and sewer applications has grown to represent about 25 percent of the applications submitted to the program each biennium. The program's focus has inadvertently shifted to the urgent need for infrastructure improvement when, in fact, municipal projects often provide relatively insignificant resource conservation and management opportunities.

Should the legislature opt to structure grant awards primarily on financial need, considerable effort would be needed to develop a universal scale on which to compare the financial need for the range of applications submitted for varied project types from governmental entities that differ in financial structure. How would one compare an irrigation district's ability to pay for irrigation improvements with a city's ability to pay for a community sewer system? Or how would the financial need and ability to pay for a groundwater study for long range resource planning in a community of 20,000 compare with the financial need and ability to pay for a drinking water system in a community of 200 households? When weighing funding decisions based on financial need these are the comparisons that would be essential to good decision making. Some projects, especially those sponsored by the university system or agencies of state government cannot be weighed with respect to financial need. These projects are submitted to the Renewable Resource Grant and Loan program based on their resource development value. Although not funded through the general appropriations process such projects certainly could be funded with other sources of state revenue.

In preparation for the 1995 Legislative Session, in response to the interests of members of the 1993 Long Range Planning Subcommittee, DNRC contracted with a consulting firm to evaluate each application for community infrastructure improvement funding. The cost of the evaluation was substantial. The cost for this information was just a fraction of the cost that would result from a comparable effort to evaluate the financial needs of all applications. To make legitimate decisions based on financial need, this evaluation would be necessary. In their wisdom, legislators in the past provided standard incentives without attempting to compare and judge community financial need. Incentives were offered only to those projects that would be financially feasible with the state's contribution.

The legislature realized all governmental entities face multiple priorities and hold limited resources. Instead of offering "gap financing" to governmental entities for projects that were resource-related, the legislature chose to affect decisions at the local level by wisely offering attractive incentives which, in some cases secured significant amounts of federal match and, encouraged outstanding natural resource projects. They knew that given an attractive incentive, communities could be motivated to make investments in projects that meet the natural resource priorities of the state. Often these projects benefit a wider segment of the population than just those represented by the project sponsor. A grant of state funds helps justify the project at the local level. DNRC respects the wisdom of the state's decision makers and recommends that the legislature increase awards only to attract superior resource conservation, management and development projects.

Because applications submitted for 1994 only represent the best resource applications in the context of the financial constraints assumed by the applicants, DNRC advises the legislature to make only nominal increases in the level of incentive provided in this year's grants. These increases should be in consideration of cost increases that have resulted from inflation and, perhaps, higher construction standards. To substantially increase awards to project applications submitted in 1994 would not necessarily achieve the benefit desired. A larger number of projects with each a smaller contribution to the overall conservation, management and development benefit will achieve a greater potential benefit than a larger incentive to the top few projects in this years roster. Within the assumed financial constraints, projects with considerable resource benefit but insufficient alternative funding source did not apply for grant funds in 1994.

Future Funding Recommendations:

In determining future incentive award levels, DNRC recommends consideration to the following factors:

1. Costs have increased due to inflation.
2. Costs have increased due to higher standards.
3. Funding for higher priority natural resource projects has not been available or has declined on the federal level. Declining federal funding for these projects has not been replaced with state funds.
4. Funding for some natural resource-related projects has increased on the state and federal levels and may continue to be on the incline.
5. Some federal programs reduce respective grant awards for projects that also receive state funding.
6. The State Water Plan continues to provide guidance concerning the water-related natural resource priorities in the state.

DNRC seeks guidance in the constraints the legislature would place on the amount of awards to be offered under the Renewable Resource Grant and Loan program. Otherwise, it is DNRC's recommendation that the amount of incentive awards offered for priority natural resource projects that provide significant opportunities for resource conservation, management and development be increased to as much as $300,000, consistent with awards under the Reclamation Development Grant program.

Project Management

After an appropriations bill is enacted to authorize grants and loans, DNRC notifies the various applicants of their funded or not-funded status. Sponsors of funded projects are reminded that work on their projects may not begin until a DNRC grant or loan agreement has been provided. DNRC does not reimburse any project costs incurred before the legislative authorization is given or before a formal funding agreement is executed.

Because grant funds become available as coal severance taxes are collected and RIT interest income is earned, lower-ranked grant projects may not be funded until sufficient revenue has been collected. To avoid significant delays, increased project costs, and additional project funding losses, a project sponsor may enter into an unfunded grant agreement with DNRC that stipulates the approved project's scope, payment, and reporting requirements. Any project costs incurred before the notice of available funding is given are done so at the project sponsor's risk.

Project Monitoring:

Procedures for monitoring projects, to ensure the program's intent is met, are primarily driven by a project grant contract agreement between DNRC and the project sponsor. The equivalent of 1.5 full-time staff administer the 40 or more active construction, planning, research, and public information grants.

Site visits are made to all municipal water and sewer projects in the construction phase and to approximately 30 percent of all other projects. Site visits are made to spot check for problems or to respond to a request for assistance from the project sponsor. Budget and staffing constraints preclude DNRC's site involvement at all projects.

Grant agreements, like contract instruments used for DNRC's other state and federal grant programs, require quarterly progress reports, expenditure reports, and a final report. During a project's contract term, the project sponsor must submit quarterly reports to DNRC. These reports must reflect the percentage of the project completed, the project costs to date, any problems encountered, and the need for any agreement amendment. Projects are closely monitored each quarter when quarterly reports are submitted. In response to any problems, needs for change in project scope, timeline

or budget, amendments to grant agreement are prepared and issued.

Project sponsors must either pay all project costs, submit a claim and obtain a reimbursement of allowable costs from DNRC or arrange for an advance of funds. Invoices may be submitted monthly, and all costs must be supported by invoices, receipts, or both. DNRC withholds 10 percent of the grant amount for surety until all contract requirements are met and the grant is closed.

To improve monitoring, the audit report prepared by the Legislative Auditor's staff recommends that DNRC provide more documentation of decisions and conversations that affect on-going projects. In response to this recommendation project monitoring staff has been directed to make notes to the file and to document conversations with correspondence. Staff will continue to closely monitor projects and to require that project sponsor provide documentation with quarterly reports. Amendments will continue to be the technique used to modify projects to adjust for problems, or needed changes in scope, budget or timelines.

Project Evaluation:

Through its monitoring efforts DNRC conducts an on-going effort to evaluate the grants funded under the Renewable Resource Grant and Loan program. This report provides a brief report to the legislature each biennium and has been accepted by the legislature for that purpose. Grant agreements are prepared based on applications submitted to the legislature and contingencies placed thereon as a result of the legislative review process. Projects are considered successful if they complete the scope of work outlined in the grant agreement.

Further evaluation has been requested from time to time by the legislature to respond to questions concerning the geographical location of projects funded, total amounts and types of projects. DNRC will continue to respond to the legislatures direction in this matter. To improve evaluation, the audit report prepared by the Legislative Auditor's staff recommends that DNRC require grantees to compare proposed objectives to actual project accomplishments in the final report. DNRC will make such a requirement of future grantees.

In its audit report the Office of the Legislative Auditor claims, "Evaluation of final reports will allow the bureau to determine if the program is measurably developing, managing, conserving, and preserving Montana's natural resources." The means to achieving such an evaluation and whether the information contained in a final report would provide the information needed is not considered. It simply indicates that a review of final reports would allow the bureau to measure its own outcomes and that a comparison of original objectives with final accomplishments might identify a significant difference. It concludes that staff may choose to look at the current application evaluation process and determine if the process for evaluating applications should be changed. The audit report recommends that DNRC formally review and evaluate final reports.

Without further instruction from the subcommittee and with consideration to current staffing constraints, DNRC will continue to review each final report as has been done in the past. This review will be documented to indicate whether the project successfully completed the objectives outlined in the original application as specified in the grant agreement.

1994 Applications for Fiscal Year 1996-97 Funding

During 1994, DNRC received 40 applications that requested grant funds totaling $3.5 million. Figure 2.2 lists all the applications submitted to DNRC for grant and/or loan funding under this chapter. They are presented in the order recommended by DNRC with their recommended funding levels. Summaries of the projects follow Figure 2.2. Project summaries presented in more detail have been prepared and incorporated into Appendix A. Copies of this appendix are available from DNRC upon request.

Figure 2.2

RENEWABLE RESOUCE GRANT AND LOAN PROGRAM
Project Recommendations
Fiscal Years 1996-1997

Applicant	Project Name	Recommended Grant Funding	Loan Funding
1. Fallon County	Lower Baker Spillway Construction and Cleaning	15,908	15,835
2. Conrad, City of	Reconstruct Outlet Conduit/Lake Francis East Dam	50,000	50,000
3. Lewistown, City of	Water System Improvements	50,000	50,000
4. Montana DNRC	Deadman's Basin Water Quality Improvement Project	47,919	111,081
5. Montana DNRC	Verification of PDSI for Montana	65,000	
6. Montana Tech of the University of Montana	Groundwater Protection and Education, Rural Schools	84,560	
7. Montana State University/Montana Watercourse	Preparing Citizens for Montana's Water Future	100,000	
8. Greenfields Irrigation District	Main Canal Flow Control System	50,000	50,000
9. Lewis and Clark County	Helena Area Bedrock Aquifer Assessment	100,000	
10. Missoula County	Conservation of Riparian Areas Model Project	100,000	
11. Thompson Falls, City of	Water Engineering Study	51,820	
12. Bozeman, City of	Separator Waste Collection Facility	50,000	158,850
13. Governor's Office/Flathead Basin Commission	Flathead Lake-Watershed Management Plan	100,000	
14. Montana DRNC	Flint Creek Return Flow Study	100,000	
15. Richland County	Lone Tree Dam Rehabilitation	50,000	50,000
16. Mile High Conservation District	Effects of Land Uses on Montana's Salinized Lands	99,933	
17. Butte-Silver Bow Local Government	Big Hole River Water Transmission Line Replacement	50,000	50,000
18. Montana Tech of the University of Montana	Hydrologic Evaluation, Florence and Seeley Lake	95,422	
19. Park Conservation District	Soil Survey on Rangelands and Forestlands/Park County	100,000	
20. Chouteau and Fergus Counties	PN Bridge - Campground	27,892	71,759
21. Libby Area Conservancy District	Libby-Granite-Cherry Creek Flood Control Plan	35,000	
22. Montana Historical Society	PLACES Master Plan	100,000	
23. Department of Fish, Wildlife and Parks	Assessment of Aquatic Resources in the Blackfoot Basin	100,000	
24. Hidden Lake Water District	Hidden Lake Irrigation Water System	34,898	104,695
25. Kalispell, City of	North Side Water Well Project	50,000	
26. Yellowstone County	Metra Park Enhancement	50,000	50,000
27. Hysham, Town of	Sewer System Improvements	50,000	50,000

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Figure 2.2

RENEWABLE RESOUCE GRANT AND LOAN PROGRAM
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10. Missoula County	Conservation of Riparian Areas Model Project	100,000	
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22. Montana Historical Society	PLACES Master Plan	100,000	
23. Department of Fish, Wildlife and Parks	Assessment of Aquatic Resources in the Blackfoot Basin	100,000	
24. Hidden Lake Water District	Hidden Lake Irrigation Water System	34,898	
25. Kalispell, City of	North Side Water Well Project	50,000	
26. Yellowstone County	Metra Park Enhancement	50,000	50,000
27. Hysham, Town of	Sewer System Improvements	50,000	50,000

Applicant	Project Name	Recommended Grant Funding	Loan Funding
28. Fairview, Town of	Water System Improvements	50,000	50,000
29. Madison Conservation District	Willow Creek Water Resource Management System	56,886	
30. Manhattan, Town of	Manhattan Water System	50,000	50,000
31. Granite Conservation District	Upper Clark Fork River Basin Water Management Plan	86,120	
32. Jackson Water and Sewer District	Geothermal Development Feasibility Study	27,500	72,500
33. Sun River Water Users Association	Sun River Water System	50,000	50,000
34. Lincoln Lewis and Clark Sewer District	Lincoln Wastewater System Study and Upgrade		4,800
Butte-Silver Bow Local Government	Montana Recreation Hotline		0
Dawson County	Bell Street Bridge		0
Fort Shaw Irrigation District	"A" System Diversion		0
Fort Shaw Irrigation District	Rehabilitation and Betterment Study		0

ERRATA PAGE

	Applicant	Project Name	Recommended Grant Funding	Loan Funding
28.	Fairview, Town of	Water System Improvements	50,000	50,000
29.	Madison Conservation District	Willow Creek Water Resource Management System	56,886	
30.	Manhattan, Town of	Manhattan Water System	50,000	50,000
31.	Granite Conservation District	Upper Clark Fork River Basin Water Management Plan	86,120	
32.	Jackson Water and Sewer District	Geothermal Development Feasibility Study	27,500	72,500
33.	Sun River Water Users Association	Sun River Water System	50,000	50,000
34.	Lincoln Lewis and Clark Sewer District	Lincoln Wastewater System Study and Upgrade	4,800	
	Butte-Silver Bow Local Government	Montana Recreation Hotline		0
	Dawson County	Bell Street Bridge		0
	Fort Shaw Irrigation District	"A" System Diversion		0
	Fort Shaw Irrigation District	Rehabilitation and Betterment Study		0

Applications Summaries

PROJECT NO. 1

PROJECT SPONSOR	FALLON COUNTY
CATEGORY	Dam

The Lower Baker Lake spillway is a concrete structure built in 1914 by the Chicago, Milwaukee, St. Paul & Pacific Railroad. The spillway concrete was evaluated by the Corps of Engineers in 1979 and was reported as being in poor condition. In 1985 the spillway toe was repaired to correct undercutting. The concrete continued to deteriorate. Now the concrete is beyond repair and the entire structure must be rebuilt. The spillway is the only discharge outlet for water from Baker Lake. If a flood should occur, it is predicted that the existing spillway will fail. This will result in the loss of numerous resources, including water, land, wetland vegetation, fish, wildlife, birds, recreation, public property, private property, and very possibly human life.

The area between the Lower Baker Lake Spillway and the water surface needs to have the small trees and shrubs removed to comply with the Dam Safety Act. The area also needs to leveled and rocked to prevent erosion.

The Baker Lake has existed for over 80 years. It is an important resource to the residents of the area and the birds and wildlife of Montana. The Baker Lake's existence depends upon the integrity of the spillway. It is important that the spillway be replaced before a serious flood occurs.

REQUEST	$	31,743	GRANT
OTHER FUNDING SOURCES	$	31,889	PROJECT SPONSOR
ESTIMATED TOTAL PROJECT COST	$	63,632	
AMOUNT RECOMMENDED	$	15,908	GRANT

PROJECT NO. 2

PROJECT SPONSOR	CONRAD, CITY OF
CATEGORY	Municipal Water

Conrad obtains its entire municipal water supply from an outlet conduit consisting of pressurized pipes located in the earthfill of the Lake Francis East Dam.

The DNRC has issued an operation permit to the owner, Pondera County Canal and Reservoir Co. A condition of the permit is that the City outlet conduit be replaced because of the pressure pipes in the dam.

Conrad has retained an engineer to determine the improvements required to comply with the operation permit. The nature of the improvements has been reviewed by the owners, the engineer, and DNRC. The estimated project costs is $360,000.

The proposed improvements include excavation in the existing pool below the dam, intake piping, relocating existing pumps, and adding a new pump, pumphouse, discharge piping, and controls. The new 30 horsepower pump will more closely match system average demands than the existing 100 horsepower pumps, resulting in energy savings. Water will be conserved by controlling the discharge from the dam.

The proposed improvements are needed to comply with the National Dam Safety Program for the purpose of minimizing the danger to downstream life and property. The reliability of the city's water system will be improved, which is needed for public health and safety.

The city is seeking a $100,000 DNRC grant, $180,000 TSEP grant and $3,500 Montana Power Company grant. Construction of the improvements is scheduled to be complete in 1996 to allow time to obtain grants. The owner and DNRC have concurred in the schedule.

REQUEST	$ 100,000	GRANT
OTHER FUNDING SOURCES	$ 180,000	TSEP GRANT
	$ 3,500	MONTANA POWER COMPANY GRANT
	$ 76,500	PROJECT SPONSOR
ESTIMATED TOTAL PROJECT COST	$ 360,000	
AMOUNT RECOMMENDED	$ 50,000	GRANT
	$ 50,000	LOAN

PROJECT NO. 3

PROJECT SPONSOR	LEWISTOWN, CITY OF
CATEGORY	Municipal Water

The City of Lewistown's water needs are supplied by Big Spring, which is located approximately six miles southeast of the City in the Big Spring drainage. A 16 inch transmission main and a 20 inch transmission main were installed in 1914 and 1938 respectively. It has been apparent for several years that both of these mains are leaking badly, resulting in a loss of about 50 percent of the water entering the mains never getting to the City. Other problem areas in the system include critically low hydrant flow rates at the Lewistown Airport, fairgrounds, and the Bonanza Hills area. The entire Bonanza Hills area is served by a single ten inch pipeline. The lack of another service main limits flows and isolates this area if the pipeline were ever to be shut down for repair. The hydrant with the most critically low flowrate is located at the airport. When this hydrant was opened the flowrate started at 250 gallons per minute and immediately started to fall. If this hydrant were left open for any period of time, there is a good possibility the pressures in the pipeline may have dropped to a negative. Negative pressures are major concerns throughout the upper zone of the system, since there currently is no upper elevation zone storage. If the upper zone pumps ever fail or are shut down for maintenance, there is a strong possibility of negative pressure occurring in the higher elevation sections of the zone.

REQUEST	$ 100,000	GRANT
OTHER FUNDING SOURCES	$ 400,000	TSEP LOAN
	$ 400,000	CDBG GRANT
	$ 7,700,000	FmHA LOAN
	$ 88,000	PROJECT SPONSOR
ESTIMATED TOTAL PROJECT COST	$ 8,688,000	
AMOUNT RECOMMENDED	$ 50,000	GRANT
	$ 50,000	LOAN

PROJECT NO. 4

PROJECT SPONSOR	MONTANA DEPARTMENT OF NATURAL RESOURCES AND CONSERVATION, STATE WATER PROJECTS BUREAU
CATEGORY	Ag Irrigation

Deadman's Basin is a Department of Natural Resources and Conservation water conservation project located 22 miles east of Harlowton in eastern Wheatland and western Golden Valley counties. It is operated and maintained by the Deadman's Basin Water Users Association. The project impounds 72,220 acre feet of water and irrigates approximately 26,000 acres. Deadman's Basin releases water through two outlet canals; the Careless Creek Canal and the Barber Canal.

The Lower Musselshell Conservation District has determined that water quality on the lower Musselshell river can be improved by decreasing flow rates in the Deadman's Basin Careless Creek outlet canal thereby reducing erosion and sediment transported in Careless Creek.

In order to maintain historic flow releases, the decrease in Careless Creek Canal will be made up by increasing the flow rate in the Barber Canal. Increased flow rate in the Barber Canal will require canal rehabilitation and enlargement. The Deadman's Basin Water Quality Improvement Project will begin work to increase the current capacity of the Barber Canal from 200 cubic feet per second (cfs) to 300 cfs and decrease flow in the Careless Creek Canal from peak discharges of 250 cfs to less than 150 cfs. Other canal enlargement projects will be completed in the future.

The Department is requesting a loan and grant combination totaling $160,000 to begin construction work to enlarge the Barber Canal and contract consulting engineering services to develop a rehabilitation plan for the existing concrete structures in the Barber Canal.

REQUEST	$ 50,000	GRANT
	$ 109,000	LOAN
OTHER FUNDING SOURCES	$ 32,675	WATER USERS
ESTIMATED TOTAL PROJECT COST	$ 191,675	
AMOUNT RECOMMENDED	$ 47,919	GRANT
	$ 111,081	LOAN

PROJECT NO. 5

PROJECT SPONSOR	MONTANA DEPARTMENT OF NATURAL RESOURCES AND CONSERVATION, WATER RESOURCES DIVISION
CATEGORY	Planning

The Montana Drought Advisory Committee (MDAC) is mandated by statute to review and report drought monitoring information to the public, to identify areas of the state with a high probability of drought, and to target reporting and assistance efforts to those areas. The Palmer Drought Severity Index (PDSI) is a surrogate index used to assess soil moisture conditions. The MDAC relies, in part, on the PDSI as a tool for operational decision-making. However, studies indicate the PDSI may not be appropriate for use as a triggering mechanism for operational decision-making, and

it has not been verified under Montana conditions.

Examples of operational decisions facing the MDAC include at what point to alert communities to commence local planning to mitigate drought effects, when to advise the governor that a state declaration of disaster is appropriate, when to suspend processing of applications for water rights, and when to request a federal USDA Secretarial Natural Disaster Determination.

This study would compare PDSI indices with, 1) actual soil moisture data gathered over a two-year period from representative locations within Montana and 2) other soil moisture indices to determine their potential suitability for use. In addition to data verification, a final report with recommendations will be prepared for the governor and MDAC for review.

Public benefits include more reliable soil moisture data on which to base mitigative decisions, improved ability to secure drought mitigation funding, better information for operational decision-making, and increased public awareness of drought.

REQUEST	$	65,000	GRANT
OTHER FUNDING SOURCES		NONE	
ESTIMATED TOTAL PROJECT COST	$	65,000	
AMOUNT RECOMMENDED	$	65,000	GRANT

PROJECT NO. 6

PROJECT SPONSOR	MONTANA TECH OF THE UNIVERSITY OF MONTANA
CATEGORY	Education

This proposed project will provide an innovative approach to protection of groundwater supplies and groundwater education. Primary and secondary students at schools not using municipal water supplies will participate in developing a Wellhead Protection Plan for their school's wells. The elements needed in developing a Wellhead Protection Plan include defining the wellhead protection area, identifying potential contaminant source areas, and managing the wellhead protection area. Developing and implementing such a plan will require an interdisciplinary effort incorporating areas such as science, computers, math, social studies, and communications. Eight schools have expressed interest in developing individual Wellhead Protection Plans for the wells that supply their drinking water. These schools are located in different areas throughout Montana and are representative of the diverse land uses, geologic, and hydrogeologic environments throughout the state.

The 1986 Amendments to the Safe Drinking Water Act specified that each state must develop a Wellhead Protection Program. Montana's Wellhead Protection Program has been submitted to the Environmental Protection Agency and is now part of the State Water Plan. Wellhead protection under the statewide program will be on a voluntary basis. Schools classify as non-community public water-supply systems and fall under the statewide Wellhead Protection Program. Currently, state funds are not available to assist community and non-community water systems in developing a Wellhead Protection Plan. The proposed program will provide resource protection as well as an excellent opportunity to enhance education through practical application of skills teamed in the classroom and field. The final result of this effort will be individual Wellhead Protection Plans for small, non-community systems that may otherwise not be able to afford to protect such an essential resource.

REQUEST	$ 84,560	GRANT
OTHER FUNDING SOURCES	$ 31,264	PROJECT SPONSOR
	$ 2,692	DEPT OF HEALTH AND ENVIRONMENTAL SCIENCES
	$ 12,490	OFFICE OF PUBLIC INSTRUCTION
ESTIMATED TOTAL PROJECT COST	$ 135,006	
AMOUNT RECOMMENDED	$ 84,560	GRANT

PROJECT NO. 7

PROJECT SPONSOR MONTANA STATE UNIVERSITY, MONTANA WATERCOURSE

CATEGORY Education

The Montana Watercourse requests $100,000 to initiate an ongoing project entitled "Preparing Local Citizens for Montana's Water Future." The purpose of the project is to prepare Montanans for active participation and leadership of local water management and planning efforts that will cultivate local water use efficiency, and protect and improve ground and surface water quality.

The project will produce a series of five local "Water Forums," each with accompanying "Citizen's Guide," to catalyze learning and dialogue on five critical water resource topics.

1) Watersheds - A custom-designed "Know Your Watershed" forum will expand citizens' awareness and knowledge of the characteristics, issues, and management of their local watersheds. Successful models will be described.

2) Instream Flows - An "Instream Flows: Problem or Opportunity?" forum will address misconceptions and common concerns, providing information and structured dialogue on water law, science, management tools, and options which can expedite local efforts to balance instream and offstream water uses.

3) Surface and Ground Water Quality - "Water Quality in Montana: What's it All About?" will provide a working knowledge of ground and surface water attributes, uses, problems, best management practices, and protection measures.

4) Water Rights - An updated version of the popular mini-course will teach basics of water law and water appropriation in Montana to interested and targeted audiences.

5) Water Conservation - "Water Conservation in Montana: What's the Price? What's the Value?" will familiarize local decision makers with costs, benefits, and options for local water conservation.

A statewide public symposium ("Local Solutions to Local Water Resource Problems") and accompanying citizen's guide, will provide successful models, lessons, experiences, and "how-to's" necessary to establish local watershed management initiatives.

REQUEST	$ 100,000	GRANT

OTHER FUNDING SOURCES	$	56,516	PROJECT SPONSOR
	$	50,700	JACKSON FOUNDATION
	$	6,000	WORKSHOP FEES
	$	4,000	SYMPOSIUM REVENUE
ESTIMATED TOTAL PROJECT COST	$	217,216	
AMOUNT RECOMMENDED	$	100,000	GRANT

PROJECT NO. 8

PROJECT SPONSOR GREENFIELDS IRRIGATION DISTRICT
CATEGORY Ag Irrigation

The purpose of this project is to physically reduce flows to the eroding Muddy Creek and Mill Coulee Creek near Sun River, Montana. It involves the installation of control structures in Greenfields Irrigation District's 59 mile canal system to retain flow during canal surplus periods.

Rain and other unanticipated canal flow surpluses contribute a great deal to high Muddy Creek flows. When this occurs, the flows cannot be immediately reduced since about 40 hours is required for a flow reduction at the source to go into effect in Muddy Creek. A study was done in 1993 to determine the feasibility of installing control structures to temporarily store surplus flows and release them to meet later demand. It was determined that nine structures could be installed to house 60 cubic feet per second for the required 40 hours.

Resulting public benefit is high. This project will reduce sediment transport from Muddy and Mill Coulee Creeks by 10,000 15,000 ton annually. Sediment transport has severely impacted the lower Sun River and has caused a considerable loss of land in the two drainages.

A very active Muddy Creek coalition is determined to remedy the Muddy Creek problem and have numerous projects and proposal in progress.

Although this phase represents a small part of the total required remedial work needed to restore the environmental integrity of the lower Sun River, it is absolutely essential that this resource be reclaimed.

REQUEST	$	100,000	GRANT
OTHER FUNDING SOURCES	$	897,451	GREENFIELDS IRRIGATION DISTRICT
ESTIMATED TOTAL PROJECT COST	$	997,451	
AMOUNT RECOMMENDED	$	50,000	GRANT
	$	50,000	LOAN

PROJECT NO. 9

PROJECT SPONSOR LEWIS & CLARK COUNTY WATER QUALITY PROTECTION DISTRICT
CATEGORY Groundwater

The Helena area is one of the fastest growing localities in the State of Montana. Expansion of residential and industrial development into hydrologically sensitive bedrock areas is occurring rapidly, increasing pressure on limited water supplies within the bedrock aquifer systems and exposing the aquifers to potential contaminant sources.

Very little is known about the Helena area bedrock aquifers. According to the U.S. Geological Survey, 45 percent of recharge to the Helena valley alluvial aquifer comes from the surrounding bedrock systems. Depletion or pollution of the bedrock water supplies would adversely impact the alluvial aquifer and the 15,500 residents that rely on this water.

The proposed project will provide comprehensive, scientific baseline data that will give planners, county commissioners, and other decision-makers the information they need to form policies and make appropriate land-use management decisions for responsible growth in the Helena area. This project will be an innovative pilot program for Montana, and techniques developed and employed during the assessment will provide a basis for other bedrock aquifer projects in the state.

REQUEST	$	100,000	GRANT
OTHER FUNDING SOURCES	$	14,152	PROJECT SPONSOR
	$	95,462	U.S.GEOLOGICAL SURVEY MATCH
ESTIMATED TOTAL PROJECT COST	$	209,614	
AMOUNT RECOMMENDED	$	100,000	GRANT

PROJECT NO. 10

PROJECT SPONSOR MISSOULA COUNTY, MONTANA
CATEGORY Planning

The continued development of riparian lands poses a significant threat to water resource, wildlife habitat, and recreational opportunities. Missoula County proposes to address this problem by designing, implementing, and evaluating a model for establishing public-private partnerships aimed at protecting the area's water resources and wildlife habitats by conserving critical private riparian lands. The goal of the Partnerships Project is to reduce the impacts of development and protect water resources through conservation of Missoula County's riparian environments by assisting non-commercial, private property owners in placing conservation easements on their critical riparian lands. An important outcome of the Partnerships Project is the validation of a replicable model for conserving and protecting riparian lands while maintaining private property rights. The project will collaborate with land trust organizations to provide assistance to private landowners in funding the "up-front" costs of placing their riparian lands in a conservation easement, thereby retaining these important lands in private ownership while conserving and protecting these critical land and water resources.

REQUEST	$	100,000	GRANT
OTHER FUNDING SOURCES	$	10,915	PROJECT SPONSOR
	$	289,085	MONTANA LAND RELIANCE/FIVE VALLEYS LAND TRUST
ESTIMATED TOTAL PROJECT COST	$	400,000	

AMOUNT RECOMMENDED	$	100,000	GRANT

PROJECT NO. 11

PROJECT SPONSOR	THOMPSON FALLS, CITY OF
CATEGORY	Municipal Water

The City of Thompson Falls proposes an engineering study be prepared to determine the deficiencies in the water system and to locate alternate sources. The city currently utilizes surface water from Ashley Creek. There are two storage tanks, one at Ashley Creek and one at Jefferson Street. There are two wells near the Clark Fork River which are only used during periods of peak demand. First water rights go to the Leufkens Ranch. Unfortunately, our peak demand is during the time we receive the least water from Ashley Creek.

Regulation may eventually require abandonment of the creek supply. If this were the case, Ashley Creek would no longer supply the reservoir or the upper 1/3 of the service area.

Due to age, the Jefferson Street tank, and cast iron, steel and asbestos cement lines throughout the system have serious leakage problems and should be replaced. For every six gallons produced, one gallon is recorded as a metered sale, which shows water production exceeds metered consumption by 500%. Not only are the city wells highly mineralized with manganese and sodium, but they do not provide adequate volumes for maximum use.

The proposed engineering study would benefit approximately 650 services or 1500 users. This proposal is necessary to prepare hydrology and engineering reports to provide an assessment of needed improvements and choosing the most cost effective and efficient alternative.

REQUEST	$	51,820	GRANT
OTHER FUNDING SOURCES	$	5,850	PROJECT SPONSOR
ESTIMATED TOTAL PROJECT COST	$	57,670	
AMOUNT RECOMMENDED	$	51,820	GRANT

PROJECT NO. 12

PROJECT SPONSOR	BOZEMAN, CITY OF
CATEGORY	Solid Waste

This proposal will fund the construction of a facility at the Bozeman Wastewater Treatment Plant to accept waste from grease, grit, oil, and sand separators. A separator is a tank installed in a sewer line to separate grease and oil and allow solids to settle out of the wastewater stream. Properly installed and maintained separators prevent pollutants from reaching groundwater or the wastewater treatment plant.

Separator wastes can contain heavy metals, chlorinated solvents, and petroleum by-products which require additional treatment before disposal. Area businesses have no approved facility to accept these wastes locally. Businesses report paying up to $1,000 for disposal of a 55 gallon drum of contaminated sludge.

Without an approved local facility some businesses illegally flush their separators, driving the solids into city sewer lines or septic fields. Other business owners improperly land-spread the sludge from their separators, a practice common with

local car washes. The water from this sludge leaches into the soil posing a potential for groundwater contamination. As the sludge dries out fine silt is then subject to winds that can expose the general population to harmful products.

Construction of this facility will provide for the safe, cost effective disposal of separator wastes. Proper disposal of these wastes will maintain the effectiveness of the Wastewater Treatment Plant and protect local groundwater.

REQUEST	$	50,000	GRANT
	$	158,850	LOAN
OTHER FUNDING SOURCES	$	23,591	PROJECT SPONSOR
ESTIMATED TOTAL PROJECT COST	$	232,441	
AMOUNT RECOMMENDED	$	50,000	GRANT
	$	158,850	LOAN

PROJECT NO. 13

PROJECT SPONSOR	GOVERNOR'S OFFICE - FLATHEAD BASIN COMMISSION
CATEGORY	Planning

Even with the implementation of a number of mitigation activities, the water quality of the Flathead River Basin has been steadily declining over the past 20 years. Much of this decline is associated with ongoing management practices, the high influx of new residents, and other point and nonpoint sources of pollution within the basin that have not been abated. Most control activities in the past have been accomplished in a piecemeal fashion and through the use of regulation alone.

The Flathead Basin Commission purpose under Montana law is to protect the existing high quality of the Flathead Lake aquatic environment, the waters that flow into, out of, or are tributary to the lake, and the natural resources and environment of the Flathead Basin. To accomplish this purpose, in part, the Flathead Basin Commission is proposing to facilitate the development and implementation of a comprehensive lake and watershed management plan and implementation of strategies to restore and sustain the high water quality of the basin. The strategy will address water conservation, water management, and the water, land, and air pollutants that are discharged into Flathead Lake and its watershed.

The Commission plans on using a collaborative, consensus-based process where the local stakeholders are empowered to identify the sources of contaminants, evaluate potential solutions, and then through the process of consensus and education, encourage and recommend that the appropriate entities mitigate the pollutant sources and improve basin management. The Commission plans to evaluate and monitor the implementation strategies undertaken.

REQUEST	$	100,000	GRANT
OTHER FUNDING SOURCES	$	160,000	EPA WATER QUALITY MONITORING FUNDS
	$	253,967	STUDIES UNDERWAY OR COMPLETED
ESTIMATED TOTAL PROJECT COST	$	513,967	
AMOUNT RECOMMENDED	$	100,000	GRANT

PROJECT NO. 14

PROJECT SPONSOR	MONTANA DEPARTMENT OF NATURAL RESOURCES AND CONSERVATION, WATER RESOURCES DIVISION
CATEGORY	Ag Irrigation

Ranchers in the Flint Creek basin have long been aware of the importance of return flows in the management of their water. Similar to a reservoir system, the aquifer recharged by flood irrigation in the spring and early summer is used in the late summer and fall to provide flows back into Flint Creek.

Future decisions in the Upper Clark Fork basin, regarding instream flows for fisheries, hydropower, and water quality, may be made with little or no knowledge of the impact of these return flows. Within the Flint Creek basin, changes in irrigation practices and a growing population could affect a traditional water management plan that has been practiced for many years.

To assess the impacts of return flows, an extensive data collection network is needed to quantify both amount, timing, and reuse of return flows. Through this proposed study, both streamflow and groundwater data will be measured throughout the year to obtain "snap shots" of water availability in the basin. Additionally, continuous monitoring, every hour, of streamflow and groundwater levels in critical areas is needed to measure short-term variability in the basin.

The data collected will be used to develop a water use model for the Flint Creek basin. The Flint Creek water users will then develop a water management plan based on the collected data and model. Additionally, the knowledge gained from this study will be a valuable beginning in understanding the affect irrigation has on hydropower and stream ecosystems throughout Montana.

REQUEST	$	100,000	GRANT
OTHER FUNDING SOURCES	$	60,970	U.S. GEOLOGICAL SURVEY MATCH
	$	14,000	U.S. BUREAU OF RECLAMATION MATCH
ESTIMATED TOTAL PROJECT COST	$	174,970	
AMOUNT RECOMMENDED	$	100,000	GRANT

PROJECT NO. 15

PROJECT SPONSOR	RICHLAND COUNTY
CATEGORY	Dam

This project consists of the construction of improvements and modifications to renovate the Lone Tree Dams to standards which will allow the high hazard dams to receive a permit from DNRC. The dams are located three miles upstream of Sidney, Montana. A grant was received to study the affects of breaching the dams, rehabilitating both dams, or rehabilitating one dam. After evaluating the various options and having discussions with various local, state, and federal officials it has been determined that the project which will provide the greatest degree of safety to the citizens located downstream of the dams and keep affects to wetlands and other environmental concerns to a minimum would be to:

a) Remove the outlet works from the lower dam to prevent impoundment of water in this dam.

b) Raise the upper dam approximately three feet to elevation 2107 and relocate the centerline 30 feet downstream from the existing dam.

c) Install a 15' wide berm on the upstream face and install a 5' square 15' deep overflow box with a 60" RCP principal spillway at elevation 2090.

d) Install a drainage berm and internal drain system on the downstream face of the dam.

e) Raise the elevation of the existing emergency spillway to elevation 2099 and rehabilitate the erosion areas.

f) Construct a second emergency spillway on the southerly side of the dam.

These improvements will create the requirements necessary to permit the Lone Tree Dam (Vaux #2) and provide for a safer environment for the citizens located downstream of this structure.

REQUEST	$ 100,000	GRANT
OTHER FUNDING SOURCES	$ 2,000	PROJECT SPONSOR
	$ 41,750	LANDOWNER
	$ 431,250	TSEP
ESTIMATED TOTAL PROJECT COST	$ 575,000	
AMOUNT RECOMMENDED	$ 50,000	GRANT
	$ 50,000	LOAN

PROJECT NO. 16

PROJECT SPONSOR MILE HIGH CONSERVATION DISTRICT
CATEGORY Groundwater

The salinization of crop land (saline seep) and shallow groundwater threatens Montana's natural heritage and agricultural resources. Montana's fish, wildlife, recreation, and vegetation is endangered by agriculturally-induced mineralization of land, surface water, and groundwater. Equally serious as the loss of productive crop land from saline seep, is the local and regional deterioration of surface-water and shallow groundwater resources which, in many areas, are the primary sources of potable water. By the mid-1970's, saline seep had taken roughly two million acres out of grain production in the plains region - Montana, North Dakota, South Dakota, Alberta, Saskatchewan, and Manitoba. However, to date, there has been no comprehensive evaluation of changes in shallow groundwater quality. In other words, "Are aquifers still being lost to saline seep, or have land-use practices improved the overall quality of shallow groundwater?" This project will develop a 20-year perspective on groundwater quality changes by re-sampling wells and springs which were originally evaluated in "Regional Assessment of the Saline Seep Problem and a Water-Quality Inventory of the Montana Plains" (Montana Bureau of Mines and Geology Open-File #42). At six to eight sites where water quality changes (either improvement or degradation) are identified through water quality sampling, land-use evaluations will be conducted to determine the cause of the change. By providing a water-quality retrospective, the long-term effects on shallow aquifers due to land-use practices, and the long-term effectiveness of saline-seep mitigation techniques will be evaluated. Landowners and land-users will be provided with the results of the evaluation at nine public meetings across the state. Because agricultural practices affect water quality in the entire state, Montana's whole population will greatly benefit from

the results of this project through information dissemination at nine public meetings hosted by seven Resource Conservation and Development organizations (RC&Ds).

In addition to the inorganic sampling described above, radionuclide samples will be collected statewide in order to augment Montana's Radon-in-Groundwater database (in the Montana Groundwater Information Center - GWIC) at the Montana Bureau of Mines and Geology (MBMG). High concentrations of radon in homes has prompted nationwide concern, and it has been shown that radon in groundwater can be a significant source of radon in air. As yet, there has been no systematic evaluation of Montana's geology and groundwater to assess the extent and concentration of radon. Results of the 1992 statewide radon-in-indoor air survey conducted by the MBMG and the Montana Department of Health and Environmental Sciences (DHES) showed that Montana marks fifth in the U.S for radon concentrations greater than the recommended level of 4 pCi/L; Montana ranks third in the U.S. for concentrations greater than 20 pCi/L! The results of this project will be coordinated with the Montana DHES for inclusion in the joint DHES-MBMG geologic radon-potential mapping effort. Montana's people will derive enormous benefit from comprehensive geologic radon-potential maps for use in residential planning and management of Montana's groundwater resources for public health protection.

All project activities will be coordinated with the Montana Groundwater Assessment Program (MGWAP), the Montana Salinity Control Association, and seven Montana RC&Ds, such that work efforts will be complementary but not duplicative. Although each program is distinctly different in terms of goals and objectives, sampling efforts, travel, and personnel, time will be integrated where appropriate in order to economize on all programs.

The objectives of this proposal are to:

1. Perform comparative analysis of long term groundwater quality trends in the Northern Great Plains region of Montana by re-sampling 200 or more wells previously sampled by MBMG in 1975-1978 and selected wells within the Montana Salinity Control Association (MSCA) program.

2. Evaluate a cause and effect relationship between land-use practices and groundwater quality changes at six to eight sites.

3. Establish a baseline database for radon concentrations in groundwater at selected sites throughout the state of Montana. Sites may include the 200 wells previously sampled by MBMG in 1975, MSCA research wells, and sites selected by the Montana Groundwater Assessment Program.

REQUEST	$ 99,933	GRANT
OTHER FUNDING SOURCES	$ 4,031	PROJECT SPONSOR
	$ 52,930	MBMG MATCH
ESTIMATED TOTAL PROJECT COST	$ 156,894	
AMOUNT RECOMMENDED	$ 99,933	GRANT

PROJECT NO. 17

PROJECT SPONSOR	BUTTE-SILVER BOW LOCAL GOVERNMENT
CATEGORY	Municipal Water

Construction began on the water system that serves Butte-Silver Bow in the late 1800's. The development of the water system was completed by the Butte Water Company, a privately owned corporation. The Butte Water Company operated

the system until the physical assets were purchased by the Government of Butte-Silver Bow in 1992. The assets were purchased by Silver Bow Water Inc. on behalf of Butte-Silver Bow to implement and insure completion of improvements to the system. The improvements were mandated by the U.S. Environmental Protection Agency and the Montana Department of Health and Environmental Science by consent decree. Construction of water filtration facilities, water storage facilities, transmission system upgrades, and distribution system improvements will address requirements of the Safe Drinking Water Act and the Surface Water Treatment Rule. Storage and filtration facilities are currently under construction. These facilities are being financed with bond issues totaling $27.4 million. A Treasure State Endowment Grant for $300,000 is partially financing the replacement of a Basin Creek Reservoir supply line.

This project proposes to replace a portion of the steel pipeline that extends approximately 22 miles from the Big Hole River to the Butte-Silver Bow urban area. The pipeline constructed in 1967 has sections that are severely deteriorated and have a high leak frequency. Cathodic protection installed in 1990 has not impacted the leak problem significantly due to the fact the original pipe installed was not coated or wrapped. This project proposes to replace approximately 2,000 feet of transmission line at an estimated cost of $357,000. The project requests a $100,000 grant, approximately 28 percent of construction costs, under the Renewable Resource Program. The project will help conserve the stream resource, increase supply to the distribution system, reduce energy and chemical demands, and overall costs associated with water production and treatment and decrease health hazards to Butte-Silver Bow residents.

REQUEST	$ 100,000	GRANT
OTHER FUNDING SOURCES	$ 257,000	PROJECT SPONSOR
ESTIMATED TOTAL PROJECT COST	$ 357,000	
AMOUNT RECOMMENDED	$ 50,000	GRANT
	$ 50,000	LOAN

PROJECT NO. 18

PROJECT SPONSOR	MONTANA TECH OF THE UNIVERSITY OF MONTANA
CATEGORY	Groundwater

Owing to rapid development in the Florence and Seeley/Swan areas, and the proliferation of individual wells and septic tanks, concerns have been raised concerning water supply and water quality. The town of Florence presently does not have community water supply or sewage treatment systems. Seeley Lake presently has a distribution system that includes lines running to the north end of Seeley Lake on the west side.

This study will evaluate hydrogeologic and other data to determine the level of risk to people in the communities and to ground- and surface water resources caused by present and future development. Existing data on geology, hydrology, water sources, and use and disposal practices (i.e. septic systems) will be reviewed and evaluated. Water wells and septic systems will be inventoried and located. If necessary, the work plan will be modified in order to collect the necessary data.

Water levels and other well information will be analyzed to determine groundwater flow directions and quantities. Aquifers will be delineated and described, and properties will be identified. Samples will be collected from selected wells for laboratory analysis. The above data will be evaluated to determine existing and/or potential contamination sources, migration paths and possible receptors. Recommendations will be formulated for future protection of public health, groundwater, and surface water. These recommendations may include creation of a sewage district for Florence, expansion of district boundaries at Seeley Lake, zoning, or changes in septic system design.

REQUEST	$ 95,422	GRANT
OTHER FUNDING SOURCES	$ 85,056	PROJECT SPONSOR
ESTIMATED TOTAL PROJECT COST	$ 180,478	
AMOUNT RECOMMENDED	$ 95,422	GRANT

PROJECT NO. 19

PROJECT SPONSOR PARK CONSERVATION DISTRICT
CATEGORY Forestry

The purpose of this grant request is to accelerate the progressive soil survey of Park County. The progressive soil survey of Park County is scheduled to begin in 1995. Park County has approximately 38 percent of the soil mapping complete as the cropland was soil mapped prior to 1990 to meet the requirements of the 1985 Food Security Act. Soils information is necessary for soil and water conservation planning, water quality planning, and preventing costly land management and development decisions. From 1987 until 1990, statewide priorities for soil surveys were directed towards the croplands of the state, mostly central and eastern, and away from the fragile forestlands and rangelands of western Montana. After the deadline for the 1985 Food Security Act were met, U.S. Soil Conservation Service (SCS) funding for soil surveys in Montana was dramatically decreased inhibiting any shift in soil survey priorities to western Montana.

The primary objective of this request is to increase staff by two soil scientists to work with the local SCS soil survey party. The soil scientists would receive training, field equipment, office space, travel expenses, and general administrative support from SCS. The conservation district will provide clerical services. Accomplishment of this project will result in an additional 140,000 acres being soil surveyed over a two year period.

REQUEST	$ 100,000	GRANT
OTHER FUNDING SOURCES	$ 1,000	PROJECT SPONSOR
	$ 330,000	U.S. SOIL CONSERVATION SERVICE
ESTIMATED TOTAL PROJECT COST	$ 431,000	
AMOUNT RECOMMENDED	$ 100,000	GRANT

PROJECT NO. 20

PROJECT SPONSOR CHOUTEAU COUNTY AND FERGUS COUNTY
CATEGORY Recreation

This project would use rip rap to stabilize approximately 1,000 linear feet of streambank along the north side of the Missouri River in
Chouteau County upstream from the PN bridge (State Highway 236). The PN Ferry Bridge connects Fergus and Chouteau Counties about 20 miles northwest of Winifred and 45 miles southeast of Big Sandy on Highway 236. It is the only link for commerce and agriculture to cross the Missouri River for 130 miles. Severe streambank erosion, will, in time, threaten the north side bridge approach. Damage is now occurring to an important campground located in an old, established cottonwood grove. The campground is on private land but under a yearly 6-month lease to the Bureau of Land Management (BLM) for public use. Total registered use during the last three years was 4,296 people. BLM employees and local residents believe actual use is much higher since most area residents don't register and the site is

popular throughout the year until the river freezes.

This proposal has broad public support. Inter-agency cooperation and long-term working relationships have been the mechanism by which effort the area has improved transportation and recreational values in the area. There is a long history of discourse and participation among: Chouteau County; Fergus County; U.S. Department of Interior, Bureau of Land Management; Montana Department of Fish, Wildlife and Parks; U.S. Army Corps of Engineers; USDA Soil Conservation Service; Montana Disaster and Emergency Services; Montana Department of Transportation; and the public.

REQUEST	$ 99,615	GRANT
OTHER FUNDING SOURCES	$ 11,953	PROJECT SPONSOR
ESTIMATED TOTAL PROJECT COST	$ 111,567	
AMOUNT RECOMMENDED	$ 27,892	GRANT
	$ 71,759	LOAN

PROJECT NO. 21

PROJECT SPONSOR	LIBBY AREA CONSERVANCY DISTRICT
CATEGORY	Floodplain

The Libby Area Conservancy District proposes to provide for some type of permanent solution to the worsening flooding of Libby, Granite and Cherry creeks, that are located adjacent to and south of Libby, Montana. Libby Area Conservancy District action would:

(a) improve water quality in the creeks by lessening the movement of bedload and provide for stream bank stabilization,
(b) reduce the risk of property loss in the floodplains of these creeks,
(c) provide for one central government body to facilitate the cooperation of all agencies and private land owners that manage or control the creeks and,
(d) obtain cooperative funding to carry out the works needed to accomplish these objectives.

In order to accomplish the goals of the Libby Area Conservancy District, we must investigate the reasons for the worsening flood conditions. These creeks have always flooded, as natural events and will continue to do so. Mining in the headwaters of these drainages in the late 1800's started the "unravelling" of these stream courses, many land use changes since that time, in both the watersheds and the floodplains, have exacerbated the condition.

Before any changes can be implemented it is necessary to know the causes of these problems. Our project proposes to investigate these and then develop a long range plan, a priority list will be developed for implementing cost-effective, long lasting action. Libby Area Conservancy District will have a consulting firm carry out this plan development, the consultant's work will be initiated in July of 1995 and be completed by June of 1996.

REQUEST	$ 35,000	GRANT
OTHER FUNDING SOURCES		NONE
ESTIMATED TOTAL PROJECT COST	$ 35,000	
AMOUNT RECOMMENDED	$ 35,000	GRANT

PROJECT NO. 22

PROJECT SPONSOR	MONTANA HISTORICAL SOCIETY, HISTORIC PRESERVATION OFFICE MONTANA PLACES PROGRAM
CATEGORY	Planning

Responding to continuing loss of rare resource values and increasing demands for quality recreational and educational opportunities, PLACES proposes a planning project. Our aim is to identify a sustainable balance of resource retention, enhancement, and use by assessing the cultural and natural resources of German Gulch as an interactive system. Assessments and systems interactions will be used to define the pattern of resource values on the land and evaluate their sensitivity to management. As results are available, a Master Plan for recreational enhancement will be developed. The final Master Plan will recommend enhancement approaches and preliminary designs. Recommendations will incorporate the results of renewable resource assessment and sensitivity evaluations into enhancements that will perpetuate present uses and provide for increased access. The Master Plan will be developed to meet the goals and objectives of the Butte - Anaconda Heritage Park and Partners Mining Heritage Park.

Renewable resources do not exist in isolation but as parts of systems. In order to maximize return for resource use, we must understand the system is more than the sum of its separate resource values. Changes anywhere impact the whole system. Present approaches to resource study and use cannot provide the kinds of data we need to assess the limits of acceptable change in a resource system. Consequently, not just resources but the layers of information their interactions add are often sacrificed through ignorance of what is being lost. Our study will model a new way of understanding our resources and managing them for maximum public benefit and sustainable use. We will collect resource assessment data in ways which preserve critical information. In that way, resources like archaeological data which would otherwise be lost in assessment are renewed indefinitely. The final Master Plan will directly address critical values in German Gulch, but could be used as a model to study and enhance any sensitive resource system in the state.

REQUEST	$ 100,000	GRANT
OTHER FUNDING SOURCES	$ 27,158	U.S. FOREST SERVICE
	$ 8,400	MAI WAH SOCIETY
	$ 20,078	SHORTFALL
ESTIMATED TOTAL PROJECT COST	$ 155,636	
AMOUNT RECOMMENDED	$ 100,000	GRANT

PROJECT NO. 23

PROJECT SPONSOR	MONTANA DEPARTMENT OF FISH, WILDLIFE AND PARKS
CATEGORY	Planning

The aquatic resources of the Blackfoot River Basin have been affected by resource, agricultural, and residential development. Extractive industries, such as mining and logging, have resulted in localized water-quality degradation and stream sedimentation. Agricultural impacts from livestock grazing, irrigation, and chemical applications include riparian and range degradation, dewatering, and nutrient enrichment of streams. Residential development in stream corridors pose a nutrient and bacterial risk to shallow groundwater and streams from septic systems. These impacts can be cumulative and have led to a decline in the trout fisheries in the Blackfoot River Basin (Moore and others, 1991; Ingman and others,

1990; Peters and Spoon, 1989). Proposed mining, possible oil and gas drilling, and rapid residential development represent potential future impacts to an already stressed system.

Previous findings (Moore and others, 1991) indicate that elevated metals concentrations in bed sediments derived from historic mining in the headwaters extend farther downstream than elevated concentrations in water. It is likely that this plume of sediment and its associated biological impacts will continue to migrate downstream. Additional inputs superimposed on this plume from future land-use changes could accelerate downstream enrichment in trace metals.

State agencies are faced with the need to make resource-management decisions that ensure comprehensive protection of the aquatic resources in the Basin while enabling multiple land uses and economic stability. State and Federal agencies have coordinated discussions with local landowners and representatives of multiple interests to develop plans for long-term monitoring and assessment of water quality and aquatic habitat.

REQUEST	$ 100,000	GRANT
OTHER FUNDING SOURCES	$ 74,250	U.S. GEOLOGICAL SURVEY
ESTIMATED TOTAL PROJECT COST	$ 174,250	
AMOUNT RECOMMENDED	$ 100,000	GRANT

PROJECT NO. 24

PROJECT SPONSOR	HIDDEN LAKE WATER ASSOCIATION
CATEGORY	Municipal Irrigation

A project proposed to construct a lawn & garden irrigation system for the Hidden Lake Subdivision. The community is located eight miles north of Billings. Hidden Lake Subdivision is a newly formed subdivision and water association. The subdivision currently has over 100 residents and is quickly expanding. The expected capacity of the subdivision is over 300 residents.

The benefits of this project are that the residents of the Hidden Lake Subdivision will be provided with an adequate supply of water for lawn and garden irrigation. This system will also provide the benefit of conserving quality drinking water. If this irrigation system is not implemented the subdivision will require an additional 400,000 gallon water storage tank to supplement their existing water system. A large cost savings will be seen by implementing this irrigation system as opposed to simply adding more water storage to the existing water system.

REQUEST	$ 34,898	GRANT
	$ 104,695	LOAN
OTHER FUNDING SOURCES		NONE
ESTIMATED TOTAL PROJECT COST	$ 139,593	
AMOUNT RECOMMENDED	$ 34,898	GRANT
	$ 104,695	LOAN

PROJECT NO. 25

PROJECT SPONSOR	KALISPELL, CITY OF
CATEGORY	Municipal Water

The City of Kalispell seeks $50,000 in grant assistance from the Department of Natural Resources and Conservation for the construction of a new well in the Upper Service Zone (USZ) of the Kalispell water system. The development of this well will benefit the citizens of Kalispell with more effective management and distribution of groundwater resources.

The USZ has experienced strong growth since its creation in 1957. This zone now provides daily and emergency water service to 672 households, small businesses, medical facilities, and schools. The only source of water for this area is an elevated tank and booster pump system which operates near full capacity to provide flows of up to 1.4 millon gallons per day during the summer months.

In 1991, the City of Kalispell commissioned the Engineering Analysis for the Upper Service Zone of the Kalispell Water System by Hafferman Engineering. This report documents the deficiencies of the USZ, including inadequate fire flows and the potential hazards of sole source supply, while recommending the development of a new well as the highest priority improvement. The engineering services of Thomas, Dean & Hoskins have now been retained to implement that recommendation. Their preliminary design report supports the Hafferman study.

The City of Kalispell will finance the majority of this project with the sale of water revenue bonds. Assistance from the DNRC Renewable Resource Grant Program will help to minimize our debt and make this important project more affordable for the citizens of Kalispell.

REQUEST	$ 50,000	GRANT
OTHER FUNDING SOURCES	$ 248,105	WATER SYSTEM REVENUES
	$ 250,000	REVENUE BOND ISSUE
ESTIMATED TOTAL PROJECT COST	$ 548,105	
AMOUNT RECOMMENDED	$ 50,000	GRANT

PROJECT NO. 26

PROJECT SPONSOR	YELLOWSTONE COUNTY
CATEGORY	Recreation

This Yellowstone County proposal is for the overall MetraPark site and fairgrounds enhancement. The Renewable Resource grant request is for the development of the stream through MetraPark grounds and addition of landscaping to make "greened" outdoor exhibit areas for the public. The MetraPark Executive Board and representatives from numerous community groups or organizations met several times to prepare and provide public input in developing a long-range master plan for MetraPark's future development.

Park improvements and the development of the stream will concentrate on the natural areas located northwest of MetraPark, the creek and waterfall which flows into the Yellowstone River. This will allow for the grounds to be used for a variety of public activities including foot paths, bike trails, picnic facilities, as well as separate pedestrian traffic from vehicular traffic or other motorized activity. These design concepts will also focus attention on the provisions for general storm drainage.

This approach to a comprehensive design and project implementation is expected to identify potential options and constraints of development including input and assistance from Billings area communities. Benefits of preserving the quality of Montana's land, water, fish, air, wildlife, and other renewable recreational opportunities will be experienced by over 800,000 persons who reside in Montana and some of the 2 million Montana visitors.

REQUEST	$ 100,000	GRANT
OTHER FUNDING SOURCES	$ 361,405	METRAPARK BOND ISSUE
	$ 101,000	COMMUNITY TRANSPORTATION ENHANCEMENT PROGRAM FUNDING
ESTIMATED TOTAL PROJECT COST	$ 562,405	
AMOUNT RECOMMENDED	$ 50,000	GRANT
	$ 50,000	LOAN

PROJECT NO. 27

PROJECT SPONSOR	HYSHAM, TOWN OF
CATEGORY	Municipal Sewer

Improvements proposed include reconstruction of the eroding lagoon banks, replacing the influent tower, and diversion piping and outfall piping to eliminate the potential for groundwater pollution. Also replacing the 30-year old pumps and lift station for a more efficient discharging system to the lagoon. Clear and t.v. the existing sewer mains to determine the extent of the sewer main replacement of the 1916 clay tile piping. Replacement of deteriorating manholes throughout the city.

REQUEST	$ 100,000	GRANT
OTHER FUNDING SOURCES	$ 127,500	TSEP GRANT
	$ 27,500	LOAN
ESTIMATED TOTAL PROJECT COST	$ 255,000	
AMOUNT RECOMMENDED	$ 50,000	GRANT
	$ 50,000	LOAN

PROJECT NO. 28

PROJECT SPONSOR	FAIRVIEW, TOWN OF
CATEGORY	Municipal Water

The town of Fairview has been upgrading their water system since 1990 when a new DNRC funded water treatment facility was constructed. The raw water in Fairview was very high in iron manganese and coal which fouled the water meters. Now that the water quality is improved, the town is now proposing to install new water meters, replace 1935 - 1940 vintage cast iron mains and increase the water system storage capacity. The installation of water meters and additional water storage will have a large impact on the amount of water utilized by the town. The current flat rate billing

of water doesn't promote water conservation. This is proved by the fact that the peaking factor of winter to summer use is almost 10 times. The replacement of old cast iron water mains will reduce the amount of water lost through line leakage. The magnitude of this project will take grant and loan funding from several different funding agencies, one of which is DNRC.

REQUEST	$ 100,000	GRANT
OTHER FUNDING SOURCES	$ 500,000	TSEP GRANT
	$ 571,750	FmHA GRANT
	$ 403,250	FmHA LOAN
	$ 20,000	PROJECT SPONSOR
ESTIMATED TOTAL PROJECT COST	$1,595,000	
AMOUNT RECOMMENDED	$ 50,000	GRANT
	$ 50,000	LOAN

PROJECT NO. 29

PROJECT SPONSOR	MADISON CONSERVATION DISTRICT
CATEGORY	Irrigation Management

The Madison Conservation District proposes to develop a computerized management plan for the water resources of the Willow Creek Basin in southwest Montana. To accomplish this the Conservation District, with assistance from the U.S. Soil Conservation Service and the U.S. Geological Survey, will install two automated streamflow gaging stations, one on the North Fork and one on the South Fork of Willow Creek. They will also install a SNOTEL site at a mid-elevation level in the basin.

In the short-term this project will provide improved irrigation scheduling and optimized water use efficiency, allow growers to make better informed cropping decisions, facilitate the development of an operating guide for Willow Creek Reservoir to facilitate better management of lake levels, reduce stream dewatering, and improve water quality.

In the long-term, the project will allow for the development of management plans for range, timber, and wildlife habitat in the area. Data from the project can be used to develop a water budget for the basin, forecast forage production, forecast and monitor range readiness and condition, monitor fire weather conditions, and develop information for recreation.

REQUEST	$ 56,886	GRANT
OTHER FUNDING SOURCES	$ 400	PROJECT SPONSOR
	$ 890	HEADWATERS RESOURCE CONSERVATION AND DEVELOPMENT
	$ 14,125	U.S. SOIL CONSERVATION SERVICE
	$ 24,500	U.S. GEOLGICAL SURVEY
ESTIMATED TOTAL PROJECT COST	$ 96,801	
AMOUNT RECOMMENDED	$ 56,886	GRANT

PROJECT NO. 30

PROJECT SPONSOR	MANHATTAN, TOWN OF
CATEGORY	Municipal Water

The town of Manhattan is a small community approximately 15 miles northwest of Bozeman, Montana. The primary water source for Manhattan is a shallow groundwater collector located about 3 1/2 miles southeast of town. The collector is recharged by a small stream which emerges as a series of up-gradient springs, as well as surface water flow. Thus, the Water Quality Bureau of the State Department of Health and Environmental Sciences has declared the supply as "groundwater under the direct influence of surface water." The town has elected to replace the existing supply with a true groundwater source. This application requests a grant of $100,000 to help Manhattan pay for the new source, disinfection facilities, and transmission piping. Furthermore, the grant money will also help in installing water meters at each service to ensure conservation and regulation of the new groundwater supply.

REQUEST	$ 100,000	GRANT
OTHER FUNDING SOURCES	$ 341,000	PROJECT SPONSOR
ESTIMATED TOTAL PROJECT COST	$ 441,000	
AMOUNT RECOMMENDED	$ 50,000	GRANT
	$ 50,000	LOAN

PROJECT NO. 31

PROJECT SPONSOR	GRANITE CONSERVATION DISTRICT
CATEGORY	Planning

The Upper Clark Fork River Basin Water Management Plan Project will support continued cooperative management of the basin's waters at the local level. It will build on an existing partnership of Upper Clark Fork water users and state and federal water managers and allow the continued development and implementation of the Upper Clark Fork River Basin Water Management Plan.

The plan is both historic and unique. It is the first basin plan in Montana developed as a result of voluntary negotiations among traditionally conflicting water interests, and largely without government funding. The interests, including local irrigators, recreationists, an environmental organization, hydroelectric utilities, local governments, the state fish agency, state and federal water management agencies, state legislators, and an industrial water user, are members of the Upper Clark Fork River Basin Steering Committee which was created by the 1991 Montana Legislature and charged with writing a comprehensive water management plan for the Upper Clark Fork. The Committee must complete the plan and present it to the Governor and Legislature by December 31, 1994 for consideration and inclusion in the State Water Plan.

The plan will address both water quality and quantity, and will recommend a continuing framework allowing the partnership of all local water interests and government agency water managers to continue addressing these and other water issues. By supporting the continued development and implementation of the plan, this project will demonstrate the viability of locally-based, cooperative water management that improves water quality and quantity, resolves water-related disputes, and protects and strengthens the basin's economy.

REQUEST	$ 86,120	GRANT
OTHER FUNDING SOURCES		NONE

ESTIMATED TOTAL PROJECT COST	$ 86,120	
AMOUNT RECOMMENDED	$ 86,120	GRANT

PROJECT NO. 32

PROJECT SPONSOR	JACKSON WATER AND SEWER DISTRICT
CATEGORY	Geothermal

The community of Jackson, Montana, is a small unincorporated ranching community in Beaverhead County. Jackson is known throughout Montana for its striking scenery, excellent hay production, and some of the State's best hunting and fishing. But perhaps the most unusual and important feature about Jackson is the hot spring located in town. The hot spring is currently the source of the community's drinking water supply and heat for several local residents including the Jackson Hot Springs Lodge.

The Jackson Water and Sewer District plans to investigate the geothermal heat potential of the spring to determine whether there is a source of renewable energy to generate electricity or provide hot water for a direct use application. A geothermal direct use project utilizes the flow of hot water to provide heat to buildings, greenhouses, aquacultural ponds, industrial processes, geothermal heat pumps, and cooling by means of refrigeration. If the area is feasible for electricity generation the power could be used locally and by the regional power grid. Any productive use of the spring would broaden and expand the local economic base and provide jobs for local ranch families.

This is the first phase in a project that could lead to significant conservation of natural resources and environmentally sound local economic growth. The project will determine the geophysical characteristics of the spring and evaluate the heat potential and economic feasibility for power generation and/or a direct use application. The product of this project will serve as a blueprint for the future development of this special natural resource.

REQUEST	$ 100,000	GRANT
OTHER FUNDING SOURCES	$ 5,000	PROJECT SPONSOR
	$ 5,000	JACKSON HOT SPRINGS LODGE
ESTIMATED TOTAL PROJECT COST	$ 110,000	
AMOUNT RECOMMENDED	$ 27,500	GRANT
	$ 50,000	LOAN

PROJECT NO. 33

PROJECT SPONSOR	SUN RIVER WATER USERS ASSOCIATION, INC.
CATEGORY	Municipal Water

Development of a groundwater supply, and design and construction of a water storage and gravity distribution system, is planned for the community of Sun River, the Sun River Valley School, the Open Buckle Subdivision, and numerous surrounding rural households. The project area is located in Cascade County about 20 miles west of Great Falls. Water users currently rely on numerous individual shallow wells and/or hauled water stored in individual cisterns. The shallow wells have documented poor water quality, with high total dissolved solids and periodic biological contamination in excess of mandated drinking water standards. The biological contaminants are the result of wastewater influence from individual septic tanks/drainfields proximal to the shallow wells. The water problems have halted economic development, including

lot sales, housing development, and community growth. By providing control, treatment, and distribution, the project water system will eliminate the current risk to human health caused by water-borne contaminants. The project will also conserve water resources by monitoring and controlling distribution, and also conserve energy by reducing the consumption of electric power needed to pump the individual wells. Furthermore, the rural water system will stimulate economic growth, and will have a substantial positive impact for the entire Sun River Valley.

REQUEST	$ 100,000	GRANT
OTHER FUNDING SOURCES	$ 300,000	FmHA GRANT
	$ 515,000	FmHA LOAN
ESTIMATED TOTAL PROJECT COST	$ 915,000	
AMOUNT RECOMMENDED	$ 50,000	GRANT
	$ 50,000	LOAN

PROJECT NO. 34

PROJECT SPONSOR	LINCOLN LEWIS AND CLARK SEWER DISTRICT
CATEGORY	Municipal Sewer

The Lincoln Wastewater System was constructed in the period from 1983 to 1985. Portions of the System were operational in 1984. The System consists of a "Small Diameter Innovative System", in which septic tanks are a part of the treatment system, along with lagoons and spray irrigation.

The System was initially installed to protect the groundwater resource in the Blackfoot River Valley. This has been accomplished, but there are changing conditions that have indicated a need for further improvements, or modifications.

1. SEPTAGE MANAGEMENT

   The Septic Tank pumpings have been spread on Sieben Ranch land Northeast of Town, for the past few years. The lease with Sieben Ranch will expire soon, and the Ranch does not prefer to renew the lease. A more controlled method of Septage disposal needs to be initiated. A new location must be selected. The District will explore tilling the septage spreadings into the soil. One option would be to do this on part of the District Lagoon property. It could be possible to add sawdust from the Post Yard, and create a composting operation.

   The irrigation system at this location would be removed and the effluent given to a neighboring ranch. This would put the effluent to a beneficial use.

2. OTHER IMPROVEMENTS

   The existing system will be reviewed to determine the need for equipment replacements, upgrades, or repairs. Over the years, there have been old unknown cesspools located. Also, a few metal septic tanks were left in the system in 1983. The cesspools need to be filled in, and the metal tanks checked or replaced, to insure no further groundwater deterioration.

3. SEWER RATES AND USER FEES

   Several of the costs (electrical and labor), associated with operating the system have increased. Also, business

or commercial users have changed operations, such as adding a restaurant in a bar facility. Therefore, the District is proposing to update the original Rate Study.

4. UPDATE "AS-BUILT" PLANS

When the System was built, the "As-Built" drawings were not computerized. With the 10 year expansions that have taken place, the "As-Builts" need to be updated and put onto a CADD system.

REQUEST	$ 100,000	GRANT
OTHER FUNDING SOURCES	$ 7,590	PROJECT SPONSOR
ESTIMATED TOTAL PROJECT COST	$ 107,590	
AMOUNT RECOMMENDED	$ 4,800	GRANT

PROJECT NO. 35

PROJECT SPONSOR	BUTTE-SILVER BOW LOCAL GOVERNMENT
CATEGORY	Recreation

The Montana Recreation Hotline (HOTLINE) is a "not-for-project" business venture of the Montana RC&D Association. The Hotline will collect existing snow survey, streamflow, and other available hydrologic and climatic data and translate and package it into Potential Future Conditions relating to fishing, backpacking, floating, skiing, and snowmobiling for the recreating public and the Montana Recreation Industry. All profit will be reinvested in Montana RC&D's to further their respective goals and objectives.

Sixty (60) to eighty (80) percent of the annual runoff in the west is derived directly from mountain snowpack that accumulates each winter. To a large extent Montana's tourism industry is directly tied to this resource. The Soil Conservation Service and 25 other federal and state agencies and private companies and individuals cooperate in making 1,000 individual snow survey measurements at 240 snow courses in Montana. In addition 79 SNOTEL (snow telemetry) sites automatically report snow water equivalent, total precipitation, and air temperature daily.

However, snow survey information is used primarily for agricultural water supply forecasts, reservoir management, flood control, power generation, and community supply forecasting. No system currently exist to provide the recreation industry and the recreating public annual runoff predictions with projections on the potential impacts on future recreation activities. In point of fact, individuals in the industry and tourism specialists in Montana have expressed the view that current forecasting systems which focus on Agriculture often have negative impact on the recreation industry.

The Hotline will assist the recreation industry by providing accurate snow and water based recreation forecasts in a manner never before accomplished. Such a project will provide direct employment opportunities in Butte-Silver Bow while marketing the entire state. At the same time funds will be raised to invest in all Montana communities through local RC&D councils.

REQUEST	$ 99,833	GRANT
OTHER FUNDING SOURCES	$ 18,993	U.S. SOIL CONSERVATION SERVICE

	$ 6,700	MONTANA RESOUCE, CONSERVATION AND DEVELOPMENT, ASSN.
	$ 2,000	BUTTE BUSINESS DEVELOPMENT CENTER
ESTIMATED TOTAL PROJECT COST	$ 127,526	
AMOUNT RECOMMENDED	NO FUNDING	

PROJECT NO. 36

PROJECT SPONSOR	DAWSON COUNTY
CATEGORY	Water Quality

A Department of Natural Resources and Conservation grant is requested to help protect the environment of the Yellowstone River when steel trusses of the historic Bell Street Bridge are refurbished. The almost 70 years of neglect contribute to future unsafe weakness in the bridge's super-structure that is currently a rusty "eye sore."

The 1,400 ft. long Bell Street Bridge is suspected to be painted with lead base paint and will require a net-like enclosure to protect the Yellowstone River when the steel trusses are prepared for painting by sandblasting. This DNRC grant request will help Dawson County protect the natural ecosystem of the Yellowstone River by funding part of the cost of containing lead chips during the sandblasting.

Today, the six-span steel truss Bell Street Bridge remains essential to Dawson County citizens where it serves as a historic tourist attraction, the designated pedestrian and bicycle route, and a utility carrier across the Yellowstone River. The bridge is handicap assessable and protects the safety of the public. The structure is listed on the National Historic Register.

This bridge carried the early "life-lines" of area citizens. Today five utilities remain attached to the super-structure. These utilities are vital arteries to area homes and the business community. Fiber optics and water are among the utilities attached to the bridge. Each of the five utilities is essential for future economic development.

REQUEST	$ 100,000	GRANT
OTHER FUNDING SOURCES	$ 265,800	PROJECT SPONSOR
	$ 500,000	TSEP
ESTIMATED TOTAL PROJECT COST	$ 865,800	
AMOUNT RECOMMENDED	NO FUNDING	

PROJECT NO. 37

PROJECT SPONSOR	FORT SHAW IRRIGATION DISTRICT
CATEGORY	Ag Irrigation

A diversion pipe will be constructed from the Main Canal to the "A" system drop by passing a siphon over Simms Creek. The siphon will carry 165 cubic feet per second (CFS). The diversion pipe would carry approximately 80 CFS. Since the District's water rights is 296 CFS, the pipe would enable the District to use their rights instead of loose them if the river is adjudicated.

The pipe would enable the District to serve the users better, eliminating waiting periods during peak irrigation seasons, which means better crops and also less waste. Users won't think they have to over irrigate because they might not get water when they want it. There will be more water in the river because of the better control and less sediments put back in the river from wasteways. At the present time the District must keep the Simms creek siphon close to capacity which causes seep. The pipe would reduce the amount going through the siphon and make more water available to the entire project.

REQUEST	$ 50,000	GRANT
	$ 200,000	LOAN
OTHER FUNDING SOURCES	$ 25,000	PROJECT SPONSOR
ESTIMATED TOTAL PROJECT COST	$ 275,000	
AMOUNT RECOMMENDED	NO FUNDING	

PROJECT NO. 38

PROJECT SPONSOR	FORT SHAW IRRIGATION DISTRICT
CATEGORY	Ag Irrigation

A study by the Bureau of Reclamation on Fish and Wildlife, a Farm Budget Study, Engineering Estimates, and Environmental Assessment Study. The benefits of this study would be in the installation of the proposed diversion pipe from the main canal of the Fort Shaw Irrigation Project to the "A" system drop. This would enable the District to be more efficient in its diversions and also help water quality downstream.

REQUEST	$ 50,000	GRANT
OTHER FUNDING SOURCES	NONE	
ESTIMATED TOTAL PROJECT COST	$ 50,000	
AMOUNT RECOMMENDED	NO FUNDING	

CHAPTER 3

COAL SEVERANCE TAX LOANS FOR MORE THAN $200,000 TO PUBLIC ENTITIES

Application Administration and Project Review Procedures

DNRC refers to public loans for more than $200,000 as "large loans." These large loans, unlike smaller public loans, typically are offered without any grant subsidy. Interest rates less than the rate the state's bond are offered in lieu of grants. Although, in the past, grants have not been provided in combination with large loans, statute does not preclude the legislature from authorizing grants in combination with a large loan. DNRC does not solicit or recommend combinations of grant and large loan funding. Recommendations are made to be consistent with past legislative action.

Applications for large loans are accepted by the DNRC's Resource Development Bureau until May 15 of each even numbered year at the same time other applications are due from public applicants under this program. In 1994, because May 15 was a Sunday and to be consistent with public law, applications submitted or postmarked by May 16 were accepted. A $250 application fee is required with each application for a large public loan.

Only publicly owned water-related projects are eligible to receive Renewable Resource loans for more than $200,000. These loans are provided with proceeds from the sale of coal severance tax secured bonds and frequently are offered at a subsidized interest rate. The subsidy is paid with coal tax revenues.

Project Solicitation:

Applications for Renewable Resource Grant and Loan program large loans submitted under this part are solicited with the process DNRC uses to solicit other public grant and loan applications described in Chapter 2. The availability of low interest loan funds is widely advertised through direct mailings, press releases in association and commercial newspapers and with contact made during promotional workshops conducted by DNRC, the Department of Commerce and the Department of Health and Environmental Sciences, at the local level. A single application form is used to solicit both grant and loan applications so the information required from applicants for large loans is the same as the requirement outlined in Chapter 2.

Application Review:

All large loan applications received by the deadline are evaluated for completeness. Those missing documentation, application fees, or other basic requirements are notified and provided time to submit additional material. After applications are reviewed for completeness, and any additional information needed is obtained from the sponsor, completed applications are given to the team of key reviewers responsible for the review and evaluation of applications. In Chapter 2, figure 2.1 shows the flow of the application review process. Loans are reviewed to determine financial, economic, technical and environmental feasibility. Applications for loan funding only, are not ranked because adequate funds have been available to finance all loans that merit funding.

Funding Recommendations

All feasible large loan applications eligible for funding receive a favorable funding recommendation if the applicant demonstrates that the capability to repay the loan exists. DNRC's recommendation includes the amount of financing needed to meet project and financing expenses and the interest rate suggested. There is no maximum allowable funding level; large loans are limited to the amount an applicant has the ability to repay under the standard repayment terms and by DNRC's bonding capacity.

Availability of Loan Funds:

In 1981, at the same time the legislature created the former Water Development program, it also adopted senate bill 409 to provide for up to $250 million in Montana Coal Severance Tax bonds. Coal severance tax bonds are to be issued "for financing specific water-related resource development projects and activities in the state authorized by the Legislature." Statutes dictate that loans made from coal severance tax bond proceeds are to be administered by DNRC, and that DNRC is to review each project to determine its technical and financial feasibility.

Although the legislation was adopted in 1981, coal severance tax loans were not issued for the first few years because the constitutionality of the state's bonding authority under this program was initially challenged. In February 1984, the Montana Supreme Court ruled in the state's favor in *Grossman v. State of Montana*, and the first Montana coal severance tax bond was sold to finance loans during that same year.

In September 1985, the Board of Examiners adopted a general resolution pursuant to which all subsequent coal severance tax bonds have been issued. A copy of this resolution may be obtained from DNRC. The general resolution requires that bonds issued be secured on a parity basis. This means that all subsequent coal severance tax bond issues have the same right or ability on proceeds flowing into the trust fund to pay bond holders. However, to assure bond holders there always will be enough coal severance tax revenue to meet debt service payments, the general resolution restricts the cumulative amount of bonds that can be issued. This restriction, made by the general resolution, is much more constraining than the $250 million statutory limit. The general resolution does not allow any additional coal severance tax bonds to be issued if annual debt payments exceed 50 percent of the coal severance tax revenue allocated to the trust, plus 50 percent of the loan repayments received from local government borrowers. Figure 3.1 shows the calculation of the cumulative amount of the additional coal severance tax bonds that can be issued under the general resolution.

Figure 3.1

REMAINING COAL SEVERANCE TAX BONDING CAPACITY CALCULATION
December 1994

REVENUE	
Coal Severance Tax Revenue	$21,424,816[2]
One-half the Maximum Annual Debt Service	+ 3,080,008
Total Annual Revenue	= $24,504,824
COVERAGE REQUIREMENT AND OUTSTANDING DEBT	
One-half the Total Annual Revenue	$12,252,412[3]
Maximum Annual Debt Service	- 6,160,016
Annual Available Bonding Capacity	= $ 6,092,396
ADDITIONAL BONDING CAPACITY	
Annual Capacity Interest / Term $5,562,100 / 6.5 percent, 20 years	
Total Bonding Capacity	$64,542,926[4]
Available CST Bond Proceeds	+ 395,079[5]
Authorized Project Loans	- 37,501,678[6]
Total Remaining Capacity	= $27,436,327

[2] Coal severance tax revenues are based on a three-year average (FY 1994 actual revenue and FY 1995 and FY 1996 project revenue).

[3] The Additional Bonds Test requires two times coverage. This is equivalent to dividing the available revenue in half; therefore, for purposes of this calculation, the total annual revenues are divided by 2.

[4] Total bonding capacity is the present value of the annual available bonding capacity. The present value was calculated using the interest rate and the term listed.

[5] This is the total CST Bond proceeds that are not obligated to be loaned on hand in bond accounts.

[6] These loans are listed in House Bill No. 8 for authorization during the 1995 Legislative session. Another $12,544,900 in loans authorized in 19913 await final closing, but are obligated.

Loan Repayment:

Coal severance tax revenue is used to pay the difference between payments received from local government borrowers and the state coal severance tax bond payments. Thus, coal severance tax bonds are paid with revenue from payments from local government borrowers along with coal severance tax proceeds.

To implement these repayment provisions, the statute established a fund structure within the permanent coal tax trust fund. As Figure 3.2 illustrates, the 50 percent of coal severance tax proceeds flowing to the permanent trust fund is first deposited in the coal severance tax bond fund. A portion of the proceeds deposited in the bond fund is transferred to the debt service account to pay for the interest rate subsidies. An amount equal to a year's debt service payment on all coal severance tax bonds is held in reserve in the bond fund.

Proceeds that exceed the subsidy payments and reserve requirement are transferred to the coal severance tax school bond contingency account. This fund was established to provide security to school bonds issued during the 1992-93 biennium. These excess proceeds are transferred to the Clean Coal Technology Demonstration fund. For each of the fiscal years 1994 and 1995, $5.0 million is deposited into the Clean Coal fund. The remaining proceeds then are transferred into the Treasure State Endowment fund, which retains 50 percent of this income. Finally, the 50 percent of the proceeds that is transferred into the Treasure State account is transferred to the coal severance tax permanent fund and the Instate Investment fund.

With the exception of the Treasure State Endowment Fund, the interest earnings associated with all account balances are transferred to the coal severance tax income fund. These interest earnings then are transferred to the general fund (85 percent) and the School Foundation Program (15 percent).

Interest Rates:

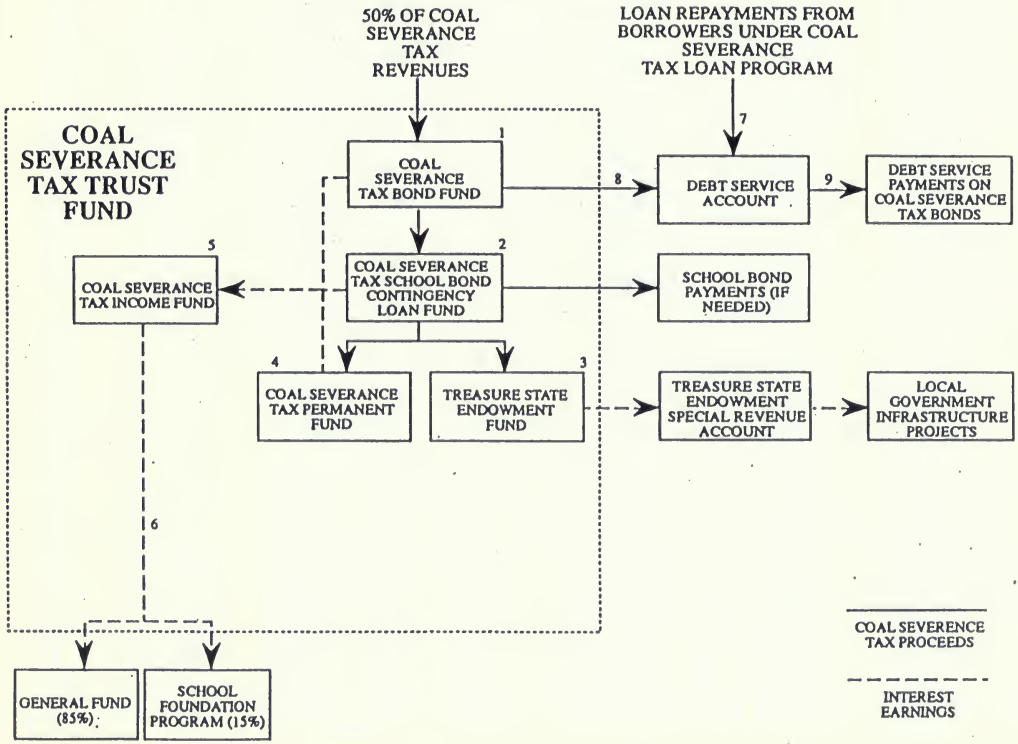
Loans may be provided at a rate less than the rate at which the state bond is sold, for all or part of the term. During the financial review of each loan application, DNRC prepares a funding recommendation that includes a recommended interest rate subsidy. Recommendations are developed to be consistent with past direction provided by the Long Range Planning Subcommittee of the Legislature. In 1987, the legislature directed that the recommended subsidy for municipal projects typically consider the user rate as a percentage of the "median household income." The schedule for subsidies with respect to municipal projects is presented below.

1. If less than 1 percent of the median household income is required to pay user rates, no subsidy is recommended;
2. If the user rate is at least 1 percent but less than 2 percent, a 1 percent interest rate subsidy for five years is recommended;
3. If the user rate is at least 2 percent but less than 4 percent, a 2 percent interest rate subsidy for five years is recommended; and
4. If the user rate is more than 4 percent of the median household income, a 3 percent interest rate subsidy for five years is recommended.

Not constrained by DNRC's recommendation, the legislature establishes the interest rate subsidy for each large loan made from coal severance tax bond proceeds. The basic interest rate on coal severance tax loans is determined by the bond market at the time coal severance tax bonds are sold. The rate of interest on most loans from the program will vary in accordance with the rate on the state coal severance tax bonds. The basic rate of interest for each large loan financed from the proceeds of a single bond issue is the same. As indicated, subsidies vary, depending on legislative authorization.

Figure 3.2

COAL SEVERANCE TAX TRUST FUND FLOW OF FUNDS SUMMARY



Project Management

For each large loan application, DNRC conducts its review to determine whether the project for which a loan application has been made is financially feasible. A project is considered financially feasible if sufficient funds can be made available to complete the project, and if sufficient revenue can be obtained to repay the loan and to operate, maintain, and replace the project. After a large loan has been authorized by the legislature and when the project sponsor is ready to secure financing, DNRC performs a more thorough review of the applicant's ability to repay the loan. At this time DNRC may require access to the applicant's most recent financial statement, budget document, and other documentation in order to assess whether the proposed project is truly financially feasible.

If the borrower provides documentation of the ability to repay a loan and all legal requirements to incur debt are met a bond purchase agreement is prepared and executed to make specific requirements and covenants with respect to a project or improvements to a project being financed. Borrowers must acquire all property rights necessary for the project, including rights-of-way and interest in land needed for a project's construction, operation, and maintenance. As appropriate, these and other stipulations also are contained in a bond resolution. Unless otherwise authorized, each loan--including principal and interest--shall be payable over a term approved by DNRC not to exceed the term authorized by the legislature. The cost of issuing the state's bond also is paid by borrowers.

Each borrower must agree not to sell, transfer, lease, or otherwise encumber the project, any portion of the project, or interest in the project without DNRC's prior written consent. Further, the borrower must notify DNRC of any changes or modifications in a project either before or during construction. Borrowers are required to acquire and maintain, with respect to the project, property and casualty insurance and liability insurance. Insurance policies must name DNRC as a certificate holder for notification purposes.

For local government revenue bonds, borrowers must establish a system fund to segregate the revenue of the system or district. Within the system or district fund, the following accounts are generally established: Construction Account, Operating Account, Revenue Bond Account, Reserve Account, Replacement and Renewal Account, and Surplus Account. These accounts ensure that the system's revenue and other funds are properly applied in a manner reasonably satisfactory to DNRC.

Loans are disbursed by warrants drawn by the State Auditor, or by wire transfers authorized by the State Treasurer in accordance with the provisions of this rule and the bond resolution. No disbursement of any loan funds shall be made unless DNRC has received from the borrower (1) a duly adopted and executed bond resolution in a form acceptable to DNRC; (2) an executed bond in a principal amount equal to the loan amount, also in a form acceptable to DNRC; (3) a certificate from an official of the governmental unit stating that no litigation is threatened or pending that would challenge the governmental unit's authority to undertake the project, to incur the loan, to issue the bonds, and to collect revenue; (4) an opinion from the bond counsel that the bond is a valid and binding obligation of the borrower payable in accordance with its terms; and (5) any other closing certificates or documents that DNRC or the bond counsel may require.

Project Monitoring:

Procedures for monitoring projects to ensure the program's intent is met are primarily driven by project loan agreements between DNRC and the project sponsor. The equivalent of one half full-time staff administer the active construction loans.

Site visits are made to all municipal water and sewer projects in the construction phase and to approximately 30 percent of all other projects to spot check for problems or to respond to a request for assistance from the project sponsor. Budget and staffing constraints preclude DNRC's site involvement for all projects.

Loan agreements require quarterly progress reports, expenditure reports, a final report, and annual financial reports over the term of the loan. Projects are closely monitored each quarter when quarterly reports are submitted. Borrowers submit documentation for all expenditures and these are checked against the loan agreement.

To improve monitoring, the audit report prepared by the Office of Legislative Auditor recommends that DNRC provide more documentation of decisions and conversations that affect on-going projects. In response to this recommendation project monitoring staff has been directed to make notes to the file and to document conversations with correspondence. Staff will continue to closely monitor projects and to require that project sponsor provide documentation with quarterly reports.

Borrowers must maintain proper and adequate records of accounts that show the complete and correct entries of all receipts, disbursements, and other transactions related to the project and, if applicable, the monthly gross revenue derived from the project's operation. Any segregation and application of the gross revenue resolution also must be shown in such reasonable detail as may be determined by the borrower in accordance with generally accepted accounting practices and principles.

Under the usual terms of DNRC's bond purchase agreement, each borrower must comply with reporting requirements during the construction period and continue to do so throughout the term of the loan. According to these requirements, within 180 days after the close of each fiscal year, the borrower must prepare and supply to DNRC an appropriate financial report with respect to the project for such fiscal year. Where applicable this report must include a statement that details the project's income and expenditures for the fiscal year, identifies capital expenditures, and separates them from operating expenditures; a balance sheet as of the end of the fiscal year; the number of premises connected to the project at the end of the fiscal year; the amount on hand in each account of the fund at the end of the fiscal year; and a list of the insurance policies and fidelity bonds in force at the end of the fiscal year, setting out each amount, the risks covered, the name of the insurer or surety, and the expiration date of the policy or bond.

Project Evaluation:

Through its monitoring efforts DNRC conducts an on-going effort to evaluate the projects funded under the Renewable Resource Grant and Loan program. This report provides a brief report to the legislature each biennium and has been accepted by the legislature for that purpose. Grant agreements are prepared based on applications submitted to the legislature and contingencies placed thereon as a result of the legislative review process. Projects are considered successful if they complete the scope of work outlined in the grant agreement.

Further evaluation has been requested from time to time by the legislature to respond to questions concerning the geographical location of projects funded, total amounts and types of projects. DNRC will continue to respond to the legislatures direction in this matter. To improve evaluation, the audit report prepared by the Office of Legislative Auditor recommends that DNRC require grantees to compare proposed objectives to actual project accomplishments in the final report. DNRC will make such a requirement of future borrowers.

Without further instruction from the subcommittee and with consideration to current staffing constraints, DNRC will continue to review each final report as has been done in the past. This review will be documented to indicate whether the project successfully completed the objectives outlined in the original application as specified in the grant agreement.

1994 Applications for Fiscal Year 1996-97 Funding

Two application requests totaling $695,000 million were submitted for coal severance tax bond loan funding. Figure 3.3 lists the applications received and DNRC's recommendations. Summaries of the projects follow Figure 3.3. Project summaries presented in more detail have been prepared and incorporated into Appendix B. Copies of this appendix are available from DNRC upon request.

Figure 3.3

**COAL SEVERANCE TAX BOND LOANS,
1995 FUNDING RECOMMENDATIONS**

COAL SEVERANCE TAX LOANS: 1994 REQUESTS

Project Sponsor	Recommended Loan Amount
HILL COUNTY	$295,000 (2% below the state bond rate for 5 years)
WHITEHALL, TOWN OF	$400,000 (1% below the state bond rate for 5 years)
TOTAL	$695,000

Application Summaries

PROJECT NO. 1

PROJECT SPONSOR HILL COUNTY WATER DISTRICT
CATEGORY Municipal Water

The Hill County Water District provides water service to 717 households located in an area of northern Montana stretching from just west of Havre to Joplin along U.S. Highway 2. The service area includes the communities of Kremlin, Gilford, Hingham, Rudyard, Inverness, and Joplin as well as adjacent areas. Through a system of pumping stations, booster pumps, storage facilities, distribution mains, and service lines, the District draws water from Fresno Reservoir, its primary source, and the Marias River, its secondary source. Due to rules recently adopted by the Environmental Protection Agency, the District must treat all water drawn from its Fresno supply, which is a surface water source. The Montana Department of Health and Environmental Sciences has given the District until the Fall of 1995, to comply with this requirement.

The engineering firm of Damschen & Associates has analyzed the alternatives available to the District and at the time of the application recommended that a conventional treatment system with the capacity of producing 800,000 gallons per day be constructed. The total estimated cost of this improvement is $1,045,000, and the District is seeking a loan from the Renewable Resource Grant and Loan Program in the amount of $295,000. The balance of the project funding will be provided by reserves from the District in the amount of $250,000, and grant assistance from the Montana Treasure State Endowment Program in the amount of $500,000. When the project is completed, the District will have the capacity to provide up to 96 million gallons of treated water annually to its users from the Fresno Reservoir source.

REQUEST	$ 295,000	LOAN
OTHER FUNDING SOURCES	$ 250,000	PROJECT SPONSOR
	$ 500,000	TSEP
ESTIMATED TOTAL PROJECT COST	$1,045,000	
AMOUNT RECOMMENDED	$ 295,000	LOAN

PROJECT NO. 2

PROJECT SPONSOR	WHITEHALL, TOWN OF
CATEGORY	Municipal Water

The proposed project consists of improvements to the Town of Whitehall's water supply, storage, and distribution system. The following summarizes the proposed improvements.

A 500,000 gallon reservoir will be constructed on grade northeast of Town. A twelve-inch transmission main will connect the reservoir to the existing distribution system. The new reservoir will: 1) increase the available storage from 200,000 to 500,000 gallons thus meeting requirements for suppressing major fires; and 2) provide increased pressures for fire flows and domestic use in the northcentral and northwest portions of Town, thus satisfying requirements of the existing population and providing for future growth possibilities.

Distribution system improvements include replacing antiquated, lead joint, cast iron pipes with new mains. Large flows through existing lines are severely retarded due to undersized pipes containing significant tuberculation on the interior. The lines have begun to fail as evidenced by numerous repairs of breaks and leaks the past few years. Installation of new PVC pipe, gate valves, fittings, and fire hydrants will provide the necessary network from the distribution core currently in place to residential and commercial areas. Fire flows and low pressures will be increased allowing public health and safety to be improved.

Flow in one well has diminished through the years. This well will be inspected, cleaned, and redeveloped as necessary to maximize water flow available to the Community. In addition, water meters will be installed on individual residential and commercial services to encourage conservation of water.

REQUEST	$ 400,000	LOAN
OTHER FUNDING SOURCES	$ 400,000	CDBG
	$ 500,000	TSEP
ESTIMATED TOTAL PROJECT COST	$1,300,000	
AMOUNT RECOMMENDED	$ 400,000	LOAN

CHAPTER 4

RENEWABLE RESOURCE GRANTS AND LOANS TO PRIVATE ENTITIES

Grant Application Administration and Project Review Procedures

As discussed in Chapter 1, applications for water-related projects from any individual, association, for profit corporation, or not for profit corporation, may be considered for funding. Only water-related projects may be funded. They must have quantifiable benefits that will exceed costs. Projects must also provide public benefits in addition to any private benefits.

Project Solicitation:

To solicit applications from private entities that provide significant public benefits, DNRC has chosen to target public water systems operated by private water user associations. To this end DNRC has contracted with Montana Rural Water Systems, Inc. (MRWS) who will solicit projects from private drinking water systems, review projects and advise DNRC on their validity, feasibility and performance. Project proposals must be submitted to MRWS by January 15, 1995 so the awarding of dollars by DNRC can be completed by April 1, 1995. This will allow project construction to begin at that time.

Information requested in the application includes:

- Name, address, and telephone number of applicant.
- Description of the problem, including the history and alternative methods of rectifying the problem.
- Complete budget information including funding sources and cost comparatives of the alternatives.
- Description of the public and private benefits of the project and the need and urgency of the project.
- Environmental impacts of the project, both positive and negative.
- Technical information and approval by DHES, EPA, or other responsible enforcement agency.

Application Review:

All applications received by the deadline will be evaluated by MRWS and ranked according to the extent each application represents a project that is critically needed, will protect public health, provides opportunities for resource conservation, and improves the environment. Applicants must hold or be able to acquire all necessary lands other than public lands and interests in the lands and water rights necessary for the construction, operation, and maintenance of the project.

Criteria for evaluating private grants is similar to the criteria outlined in Chapter 2 for public grants. For example, economic feasibility is judged to verify that the anticipated benefits directly attributable to a project will exceed all associated costs. Like public grants, private grants are also evaluated to determine the potential adverse environmental impacts, in compliance with the Montana Environmental Policy Act. Projects that would result in significant impacts would not be recommended for funding by DNRC until an environmental assessment or environmental impact study has been accomplished. Recommendations are made to minimize impacts and to ensure that appropriate steps are taken to protect the environment.

State law requires DNRC to solicit views of interested and affected parties, including local, state, and federal agencies, concerning projects submitted for grant funding. This is accomplished through the review of the project by state and local agencies during the planning and design process. Any potable water system project must be approved by DHES to assure that it meets state standards. Local views are solicited during the planning process as there is generally a local increase in water rates required to fund the project.

Funding Recommendations

Statute provides criteria for the selection of grant projects and authorizes DNRC to review and approve projects to the extent that grant funds are appropriated by the legislature. In the past, however, DNRC has not received an appropriation for private grants. Historically, private grant applications were solicited, reviewed, ranked, and administered with public grant applications. DNRC removed specific references to private individuals in legislative reports and during its legislative presentations. Legislative appropriations then were made to individual private projects identified by the project title, with the project sponsor listed only as "Private Applicant."

According to Montana's Constitution appropriations may not be made to individuals. To provide for private grants in 1993, DNRC requested a lump sum appropriation to fund private applications under an application process separate from the process used for public grants. The legislature provided $100,000 to fund grants to private entities in 1993 and 1994.

DNRC's role is to review and screen grant requests to determine whether the proposed projects are technically and financially feasible. DNRC will evaluate MRWS recommendations based on criteria outlined in statute; within funding constraints the highest ranked projects will be recommended to DNRC's director for funding. Grants will only be recommended for projects where need and urgency are documented. Feasibility studies, research, and/or public information projects will not be recommended for funding. By law, grant funding for any project may not exceed 25 percent of the total estimated cost of the project.

Project Management

After DNRC's director has acted on the funding recommendations prepared by staff, DNRC will notify the applicants of their funded or not-funded status. DNRC does not reimburse any project cost incurred before a formal funding agreement is executed.

Project Monitoring:

Procedures for monitoring projects, to ensure the program's intent is met, are primarily driven by a project grant contract agreement between DNRC and the project sponsor. The equivalent of 1 full-time staff administers active private grants and all private loans. MRWS has agreed to provide technical support to private grant projects during design and construction phases. Budget and staffing constraints preclude DNRC's site involvement at all projects.

Grant agreements, like contract instruments used for DNRC's other state and federal grant programs, require quarterly progress reports, expenditure reports, and a final report. During a project's contract term, the project sponsor must submit quarterly reports to DNRC. These reports must reflect the percentage of the project completed, the project costs to date, any problems encountered, and the need for any amendment to the grant contract. Projects are closely monitored each quarter when quarterly reports are submitted. In response to any problems, needs for change in project scope, timeline or budget, amendments to grant agreement are prepared and issued.

Project sponsors must either pay all project costs, submit a claim and obtain a reimbursement of allowable costs from DNRC or arrange for an advance of funds. Invoices may be submitted monthly, and all costs must be supported by invoices, receipts, or both. DNRC withholds 10 percent of the grant amount for surety until all contract requirements are met and the grant is closed.

As discussed in Chapter 2, the audit report prepared by the Legislative Auditor's staff recommends that DNRC provide more documentation of decisions and conversations that affect on-going projects. In response to this recommendation project monitoring staff has been directed to make notes to the file and to document conversations with correspondence. Staff will continue to closely monitor projects and to require that project sponsor provide documentation with quarterly reports. Amendments will continue to be the technique used to modify projects to adjust for problems, or needed changes in scope, budget or timelines.

Project Evaluation:

Evaluation of private grants will be accomplished in the manner used to evaluate public grants.

Grant Applications in Calendar Years 1993 and 1994

As discussed, grant project proposals must be submitted to MRWS by January 15, 1995.

Grant Projects Previously Funded

1)	87-5063	Two Leggins Water Users Assoc.	Hardin	$20,000
2)	84-5017	Marstaeller, Gerald	Melville	$25,000

Loan Application Administration and Project Review Procedures

Loans to private individuals also must promote and advance the beneficial use of water and allow Montana's citizens to fully use the state's water. Loan funding became available in 1981 when the legislature earmarked $350,000 under the former Renewable Resource Development program to finance loans to private individuals. At the same time, DNRC was given the authority to issue general obligation bonds to finance private loans.

Project Solicitation:

Projects are solicited through press release. When a bond is sold a press release is sent to all newspapers in the state. Additionally, word of mouth, promotion by irrigation equipment dealers who are aware of the program, encouragement from local SCS offices and Conservation Districts, and presentation by staff presentations at various industry functions serve to solicit applications for loan funding.

Application Review:

Loan applications are submitted at any time. DNRC staff reviews the application for completeness and requests additional information when needed. Technical aspects of the project are usually completed by the SCS, or a private engineer. If the project is not designed by a qualified professional, DNRC will closely review the project design and specifications. Financial review is completed by the DNRC and includes an evaluation of the applicants financial strengths, weaknesses, and risk taking ability. This also includes an evaluation of the security offered and a determination of the relative security position DNRC will have. All of the these factors are considered in the recommendation to the loan committee.

Funding Recommendations

All feasible private loan applications eligible for funding receive a favorable funding recommendation if the applicant demonstrates that the capability to repay the loan exists. Projects must be technically and economically feasible, and must pay for themselves over the life of the installation through water savings, increased crop production, or other measurable benefits.

For private individuals, $200,000 is the maximum loan amount allowable under the Renewable Resource Grant and Loan program. DNRC lends funds for a term not longer than 30 years or the estimated useful life of the equipment purchased or materials installed. For new irrigation equipment, 15 years is the allowable term; for used irrigation equipment, the term usually is 10 years or less.

Availability of Loan Funds:

DNRC has the authority to issue general obligation Renewable Resource bonds totaling up to $10 million to finance private loans. Thus far, bonds totaling about $7.5 million have been issued to finance private loans. To finance loans, DNRC sells bonds on the open market.

Interest Rates:

The rate of interest on the state's general obligation bond determines the interest rate for private loans. Partially, because the interest obtained by the state has varied, the basic rate for private loans has varied from 5.7 to 9.5 percent. Tax law has also contributed to increased interest rates. Before 1986, state bonds sold to finance DNRC projects were tax-exempt. The tax law of 1986, thereafter prohibited financing private ventures with tax-free bonds. Therefore, bond sales to finance private projects after 1986 have been taxable (federal taxable, state tax-exempt). Because investors demand a higher interest rate on investments when their investments are subject to federal income tax, sale of these taxable bonds resulted in higher interest rates than those of the earlier, tax-exempt bonds.

In addition to interest costs, borrowers also pay a share of bond issuance costs proportionate to the percentage of the bond used to finance their loan. Higher interest rates and issuance cost charges have made private loans less attractive than those offered when the program first started. Although less attractive, private loans remain competitive with conventional financing because of the rate on taxable bonds are still slightly under interest rates obtainable from conventional financing. DNRC's loans also provide financing at a fixed interest rate for a period longer than that available to borrowers through their local financial institutions.

With longer terms and competitive fixed interest rates, in most cases, make these loans continue to be attractive to borrowers interested in long-term financing for major equipment or system purchases. The exception are loans for less than $10,000. For small loans, closing costs will outweigh the benefit of DNRC's lower interest rate. DNRC

recommends that projects needing less than $10,000 seek funding from other sources. Closing costs include a $150 non-refundable application fee and title insurance.

Project Management

Borrowers must acquire all property rights necessary for the project including rights-of-way and interest in land needed for the construction, operation, and maintenance of the project. Title insurance, a title opinion or other documents showing the ownership of the land, mortgages, incumbrances, or other liens must be provided to DNRC.

Loans must be secured with real property valued higher than the loan amount requested. According to statute, security equal to at least 125 percent of the loan's value is required. Loans may be secured with a first or second real estate mortgage, an assignment of accounts receivable, certificates of deposit, or similar securities, or other security as accepted by the DNRC. To adequately secure the state's interest, DNRC requires a security equal in value to at least 150 percent of the loan. For example, a loan application for $75,000 would require real estate security of $112,500. DNRC will accept a second mortgage on property if the state's interest can be adequately secured. DNRC may require an appraisal of real property used for securing a loan. Cost of the appraisal must be paid by the applicant.

After an application is approved for financing, interim financing may be secured by the applicant, with interest costs included in the DNRC's loan financing. The Renewable Resource Grant and Loan program does not refinance existing loans; only new ventures are eligible.

Loans to private entities are disbursed by warrants drawn by the state auditor or wire transfers authorized by the state treasurer. Before disbursement can occur, all loan documents must be properly signed, security documents must be filed with the county Clerk and Recorder, the final Title Insurance policy must be in force, and an invoice with a certificate of inspection must be submitted by the borrower to document the use of funds.

Project Monitoring:

Project construction is monitored by the SCS if there is cost share money involved, by the borrower as he has a vested interest in the successful completion of the project, and by bureau staff through field visits when possible.

Borrowers must maintain proper and adequate records of accounts that show the complete and correct entries of all receipts, disbursements, and other transactions related to the project and, if applicable, the monthly gross revenue derived from the project's operation. Any segregation and application of the gross revenue resolution also must be shown in such reasonable detail as may be determined by the borrower in accordance with generally accepted accounting practices and principles.

Project Evaluation:

Through its monitoring efforts DNRC conducts an on-going effort to evaluate the grants funded under the Renewable Resource Grant and Loan program. DNRC will continue to review each final report as has been done in the past. This review will be documented to indicate whether the project successfully completed the objectives outlined in the original application as specified in the loan agreement.

Loan Projects Previously Funded

Figure 4.1 lists the status of private loans that have been authorized under the Renewable Resource Grant and Loan program. As of October 1994, 104 private loans had been approved. A total of $7,271,906 has been advanced, and $126,210 is committed to projects that had not been disbursed. Loans have been used to finance projects involving new and refurbished irrigation systems, riprap, irrigation wells and refurbishing private drinking water systems.

Figure 4.1

Private Loan Summary 1981 - 1994

	Contract Number	Borrower	City	Amount	Loan Balance	Rate	Interest Security
1)	93-3164	AUGARE, C	Cut Bank	78,880.00	74,693.20	8.5600	1st on 240 ac. & Equip.
2)	94-3183	BENSON. K.	Scobey	73,450.00	66,581.50	5.6500	1st on 190 ac. 2nd on 2247 ac.
3)	85-3012	BIG DITCH CO.	Laurel	80,000.00		7.2000	Loan satisfied.
4)	91-3144	BOLSTAD, J AND M	Homestead	53,000.00	46,876.34	8.5600	1st on 160 acre; 2nd on 477 acre.
5)	86-3061	BOOHER, BARBARA	Clancy	200,000.00		6.9200	Loan loss $200,000.00.
6)	86-3037	BOUMA, L	Augusta	86,397.00	52,776.59	7.2200	3rd on 916 acres and equipment.
7)	86-3038	BRADY, R AND L	Fairfield	48,567.93	37,970.71	7.2200	2nd mortgage on 130 acres.
8)	82-3003	BUSBY, D AND C	Black Eagle	35,000.00		12.6200	Loan satisfied.
9)	90-3133	CANYON RANCH, INC.	Dillon	315,000.00		9.0000	Loan satisfied.
10)	85-3027	CARLSON, P	Roberts	47,500.00	40,464.98	9.0000	2nd mortgage on 480 acres.
11)	94-3178	COTTOM & SONS	Dillon	90,460.00	89,533.26	5.6500	2nd on 1035 ac.
12)	94-3179	COTTOM FARMS	Dillon	88,080.00	87,181.34	5.6500	2nd on 700 ac.
13)	85-3009	COVE IRRIGATION	Laurel	72,000.00	13,071.95	7.2000	Water Right, Turn-off.
14)	95-3186	CRANE, C.	Choteau	51,720.00	51,720.00	5.6500	2nd on 400 ac.
15)	86-3031	CUMMINS, D	San Ramon	37,536.00		7.2200	$20,125.00 written off.
16)	86-3034	DAIRY LAND FARMS	Manhattan	29,610.00	21,097.82	7.2200	3rd mortgage on 470 acres.
17)	86-3065	DOLAN, J	Belgrade	25,000.00		7.2200	Loan satisfied.
18)	86-3032	DYKSTRA, S	Bozeman	39,510.00	29,941.30	7.2200	1st mortgage 160 acres.
19)	90-3140	EAST BENCH FARMS	Dillon	60,000.00	50,436.57	9.0200	2nd mortgage on 530 acres.
20)	93-3171	EAST BENCH GRAIN	Dillon	60,000.00	57,413.75	7.6400	3rd on 530 ac.
21)	86-3056	EDMONSON, H AND J	Bozeman	48,276.00	28,671.71	6.9200	2nd mortgage on 210 acres.
22)	89-3122	EKSTROM, D	Clinton	50,575.00	30,983.57	9.5300	2nd mortgage on 210 acres.
23)	85-3028	FABER, N	Chinook	133,598.50	103,748.83	8.7100	2nd mortgage on 1400 acres.
24)	91-3150	GENTRY, R AND T	Glendive	155,000.00	41,719.10	8.5600	1st on 560 acres and equipment.
25)	85-3021	GILTRAP, R	Twin Bridges	24,530.00	18,271.22	8.7100	1st mortgage on 44.32 acres.
26)	86-3036	GLAUS, K	Cardwell	46,458.00	36,720.05	7.2200	2nd mortgage on 755 acres.
27)	91-3143	GORDON CATTLE CO.	Chinook	133,438.45	115,436.39	8.5600	1st mortgage on 3985 acres.
28)	88-3102	GRADY, R	Canyon Creek	22,680.00	11,036.12	7.3300	1st mortgage on 640 acres.
29)	86-3076	GULICK, M AND D	Fairfield	53,000.00	34,902.26	6.9200	2nd on 220 acres.
30)	89-3120	GULICK, M AND D	Fairfield	95,000.00	79,939.78	9.5300	1st mortgage on 320 acres.
31)	86-3070	HERSRUD, L AND K	Columbus	15,000.00	10,274.15	7.2200	2nd on 130 acres.
32)	85-3023	HOLLIDAY L'STOCK	Martinsdale	45,463.00		8.7100	Loan satisfied.
33)	86-3072	HULS DAIRY	Corvallis	45,000.00		7.2200	Loan satisfied.
34)	86-3073	IVERSON, D	Fairview	25,250.00	6,576.97	7.2200	3rd mortgage on 1393 acres.

	Contract Number	Borrower	City	Amount	Loan Balance	Rate	Interest Security
35)	88-3099	JENNI, D	Lewistown	100,000.00	69,614.62	7.3300	1st mortgage on 644 acres.
36)	89-3112	JOHNS RANCH INC.	Whitehall	48,500.00	37,575.11	7.3300	1st mortgage on 1,370 acres
37)	89-3118	JOHNSON, M	Fairfield	40,000.00		7.3300	Loan satisfied.
38)	89-3115	JOHNSON, M	Fairfield	41,810.00	32,065.69	7.3300	1st mortgage on 125 acres.
39)	90-3132	KAMERMAN, D	Manhattan	42,000.00	37,278.79	9.5300	1st on 40 ac; 2nd on 430 acres.
40)	86-3055	KASPER BROTHERS	Fairfield	50,000.00	30,656.50	6.9200	2nd mortgage on 1115 acres.
41)	86-3063	KEARNS RANCH	Melrose	85,000.00	63,496.14	6.9200	2nd mortgage on 920 acres.
42)	89-3121	KIMM SR., C	Bozeman	48,790.00		7.3300	Loan satisfied.
43)	93-3169	KLINKER, M.	Fairlield	85,000.00	83,044.39	7.6400	2nd on 320 ac.
44)	86-3062	KLINKER, N	Fairfield	45,000.00	32,337.10	7.2200	2nd mortgage on 120 acres.
45)	86-3074	KOLB, L	Missoula	40,000.00	31,482.57	8.7100	1st mortgage on 80 acres.
46)	94-3182	LACHER, M.	Fairfield	36,000.00	33,972.00	5.6500	2nd on 158 ac.
47)	88-3105	LARSON L & LVSTK	Choteau	74,680.00	53,656.48	7.3300	2nd on 1191 acres - equipment.
48)	95-3185	LAZY K 6 RANCH	Ft. Benton	67,500.00	52,336.00	5.6500	1st on 1748 ac.
49)	94-3177	MALESICH RANCH CO.	Dillon	115,526.00	115,526.00	5.6500	2nd on 6413 ac.
50)	90-3130	MALONE, M	Livingston	34,730.00	28,935.35	9.5300	2nd mortgage on 240 acres.
51)	86-3071	MANLEY RANCHES	Drummond	65,000.00	39,064.44	7.2200	1st mortgage on 640 acres.
52)	87-3080	MANUEL, R	Fairfield	48,027.69	31,254.69	6.9200	2nd mortgage on 200 acres.
53)	84-3006	MARSTAELLER, G AND S	Melville	75,570.02	75,570.02	7.2000	Bankruptcy plan.
54)	84-3006-2	MARSTAELLER, G AND S	Melville	99,429.98	92,437.83	9.7500	Bandruptcy plan.
55)	85-3026	MARTINSEN, L(MADSEN)	Roberts	16,159.80		8.7100	Loan assumed by Carlson.
56)	89-3116	MCINERNEY, G	Fairfield	44,295.00	34,301.20	7.3300	2nd on 158 acres and equipment.
57)	94-3180	MCINERNEY, M. & G.	Fairfield	50,656.00	50,656.00	5.6500	2nd on 489 ac.
58)	85-3020	MELLINGER, G AND D	Fairfield	26,600.00	19,646.93	8.7100	2nd mortgage on 600 acres.
59)	84-3007	MICHUNOVICH, J	Billings	119,834.38		7.2000	Loan satisfied.
60)	88-3095	MIDVALE WATER SERV	Eureka	95,525.00	71,114.82	7.3300	1st on three parcels of real estate.
61)	93-3161	MUCHMORE, F	Helena	18,435.00	17,899.77	8.5600	2nd mortgage on 15 acres.
62)	83-3005	NERLIN, D AND D	Bozeman	45,000.00		9.0700	Loan satisfied.
63)	86-3039	OHS, G	Harrison	194,937.41	60,314.54	7.2200	2nd mortgage on 488.5 acres.
64)	92-3154	PADDOCK BROS.	Fairfield	68,260.00	57,660.53	8.5600	2nd mortgage on 790 acres.
65)	84-3008	PEARCE, M AND D		75,000.00		7.2000	Assumed by Canyon Ranch.
66)	85-3019	PEARCE, M AND D		81,903.00		8.7100	Assumed by Canyon Ranch.
67)	93-3168	PEARSON, W.	Fairfield	85,000.00	81,940.83	7.6400	1st on 275 ac.
68)	86-3058	PEARSON, G	Fairfield	80,000.00	47,702.84	7.2200	2nd mortgage on 320 acres.
69)	93-3167	PEARSON, G	Fairfield	130,000.00	130,000.00	7.6400	1st on 360 ac.
70)	89-3113	PERKINS, I & SONS	Bynum	40,000.00	23,566.25	7.3300	2nd and 3rd on 4,000 acres.
71)	89-3123	PIRTZ, R	Pray	27,800.00	23,347.42	9.5300	2nd on 320 acres and sprinkler.
72)	85-3024	PL'SNT HLS H'OWNER	Kalispell	12,168.67		8.7100	Loan satisfied.
73)	93-3172	POCHA BROTHERS	Helmville	60,000.00	48,350.56	7.6400	2nd on 640 ac.
74)	84-8003	PONDERA CANAL CO.	Valier	100,000.00		7.2000	Loan satisfied.
75)	90-3135	POTOSI GENERAT'G CO	Idaho Falls	119,979.72	119,979.72	8.7100	1st on real estate and equipment.

	Contract Number	Borrower	City	Amount	Loan Balance	Rate	Interest Security
76)	86-3049	POTOSI POWER CO	Pony	200,000.00		8.7100	Transfered to Potosi Gen. Co.
77)	86-3064	PRIDDY, C	Dixon	20,550.00	12,627.41	6.9200	1st mortgage on 80 acres.
78)	86-3069	R-BAR-RRANCH, INC.	Cameron	20,000.00	11,995.19	7.2200	2nd mortgage 640 acres.
79)	88-3107	R-BAR-R RANCH, INC.	Cameron	20,000.00	14,341.49	7.3300	2nd on 640 acres and equipment.
80)	92-3153	SADDLE MNTN SERV	Clancy	46,200.00	11,681.87	7.2300	1st on3.34 ac. & equip.
81)	94-3181	SAMPSEN, R	Dagmar	121,832.00	117,598.80	5.6500	2nd on 5198 ac.
82)	89-3111	SAMPSEN, R	Dagmar	70,000.00	53,504.11	7.3300	1st on 160 acres; Co-signatures.
83)	93-3170	SCOTT, R	Fairfield	44,490.00	43,569.53	7.6400	1st on 84 ac 2nd on 130 ac.
84)	86-3033	SINNEMA-FLIKKEMA	Manhattan	38,430.00	30,450.39	7.2200	2nd on 1300 acres.
85)	89-3126	SMITH FARMS, INC.	Dagmar	50,800.00		9.5300	Loan satisfied.
86)	91-3151	SPA MOTEL	Wh Sul Sprs	35,200.00	32,732.24	8.5600	2nd on R E & personal prop.
87)	92-3155	SPANGLE RANCH	Dillon	43,140.00	41,386.42	8.5600	1st on 640 acres.
88)	83-3004	SQUIRES, K	Fort Benton	18,400.00		10.9400	Loan satisfied.
89)	91-3142	STANDLEY SR., D	Fairfield	64,820.00	59,747.67	7.2300	2nd on 517 acres.
90)	92-3156	STEINBACH, M	Wolf Creek	45,000.00	41,661.91	8.5600	1st mortgage on 120 acres.
91)	90-3137	STENSVAD, INC.	Melstone	30,000.00	27,342.39	9.0200	1st mortgage on 115 acres.
92)	90-3131	STODDARD, S	Dillon	200,000.00		9.5300	Loan satisfied.
93)	85-3022	STOVALL, W AND S	Roberts	70,000.00	54,869.22	8.7100	2nd mortgage on 840 acres.
94)	86-3035	STUCKY, EARL	Avon	109,750.00		7.2200	Loan satisfied.
95)	82-3002	SWAN RANCH CO.	Twin Bridges	9,915.00			Loan satisfied.
96)	85-3025	SWANDAL, BONNIE	Livingston	30,000.00		8.7100	Loan satisfied.
97)	93-3166	TOMMERUP, R.	Dillon	59,170.00	56,941.37	7.6400	2nd on 342 ac.
98)	87-3088	TONNE, WAYNE R.	Geraldine	40,170.00	28,894.06	7.8100	2nd mortgage on 317 acres.
99)	92-3158	TRI. G, INC.	Townsend	82,680.00	71,450.95	8.5600	2nd mortgage on 547 acres.
100)	87-3081	TWO LEGGINS	Hardin	120,000.00	66,392.22	6.9200	Real estate/Turn-off.
101)	87-3090	VANDYKE, N AND D	Bozeman	46,815.00	36,999.82	7.9600	2nd mortgage on 242 acres.
102)	90-3141	VENHUIZEN S. TATOES	Manhattan	200,000.00	185,247.93	9.0200	2nd on 320 acres; guarantee.
103)	86-3057	WAGON WRENCH, INC.	Pony	180,000.00	139,319.05	7.2000	1st mortgage on 760 acres.
104)	88-3109	WILLIAMS, W AND L	Toston	51,000.00		7.3300	Loan satisfied.
			TOTAL:	7,267,459.55	3,899,952.07		

Loan Applications in Calendar Years 1993 and 1994

As of the end of October 1994, 21 loan applications had been received for the period of November 1992 through October 1994. Applicants requested a total of $1,545,984. 20 of these loans were approved by DNRC's director and have received or will receive $1,420,984. Figure 4.2 lists the application requests received and DNRC's recommendations.

Figure 4.2

PRIVATE LOAN APPLICATIONS, 1993-94

Contract Number	Amount Requested	Amount Approved
Pending	$ 53,435	$ 53,435
Pending	51,350	51,350
93-3161	18,435	18,435
93-3164	78,880	78,880
93-3166	59,170	59,170
93-3167	130,000	130,000
93-3168	85,000	85,000
93-3169	85,000	85,000
93-3170	44,490	44,490
93-3171	60,000	60,000
93-3172	60,000	60,000
94-3177	115,526	115,526
94-3178	90,460	90,460
94-3179	88,080	88,080
94-3180	50,656	50,656
94-3181	121,832	121,832
94-3182	36,000	36,000
94-3183	73,450	73,450
95-3185	67,500	67,500
95-3186	51,720	51,720
00-0000	125,000	000
TOTALS	$1,545,984	$1,420,984

CHAPTER 5

RENEWABLE RESOURCE GRANT AND LOAN PROGRAM EMERGENCY GRANTS

Application Administration and Project Review Procedures

In addition to the regular funding available during each Renewable Resource Grant and Loan Program grant cycle, limited funds are also available for emergency projects necessary to mitigate immediate water-related problems. These funds are reserved to help finance emergency projects that, if delayed until regular legislative approval can be obtained, will cause substantial damage or legal liability to the project sponsor.

Applications for emergency grants are accepted by DNRC at any time an emergency occurs. Only public entities are eligible to apply and applications must be for projects that are water-related. No application fee is required.

Project Solicitation:

No formal solicitation for applications is conducted. Engineering firms and other consultants likely to be involved with eligible emergency projects have been informed that emergency funds exist. During presentations to solicit applications for the regular public grant program, the availability of emergency funding is discussed.

To request funds, applicants are required to submit a letter containing:

- A description of the problem.
- A statement of when the problem occurred.
- The proposed solution.
- Cost estimates and documentation.
- Documentation of the community's financial condition and ability to otherwise pay for the desired repairs.

In calendar years 1993 and 1994, ten emergency requests were submitted to DNRC. Of the ten applications received, six projects were funded.

Application Review:

As with funding for other renewable resource projects, emergency funds must be used for projects that will enhance the common well-being of Montanans through measurable conservation, management, use, development, and protection (including improvement or reclamation) of a water resource. All applications submitted are evaluated for completeness. Those needing more documentation are notified and asked to submit additional material immediately.

Requests for emergency funds are reviewed by DNRC staff. DNRC's engineer conducts a site visit to observe the problem and to determine feasible alternatives. During the site visit, the project is evaluated to determine it eligibility for funding under the Renewable Resource Grant and Loan program. Projects must be owned by a public entity, water-related and urgent to merit further consideration. Technical experts from other government agencies, including the Water Quality Division, Department of Health and Environmental Sciences, are made aware of the project and are solicited for technical opinions, guidance, and information.

Funding Recommendations

As discussed in Chapter 1, statute allows DNRC to request up to 10 percent of the funds available for grants in a biennium to use for emergency grants. Typically DNRC requests $125,000 to fund projects each biennium. Any funds not disbursed for emergency grants will be used to fund lower-ranked grant projects approved for funding by the legislature in 1993. DNRC will request an additional $125,000 during the 1995 session to fund emergency grants for fiscal years 1996 and 1997.

Funding recommendations are made on a case by case basis, within the constraint of available funds. As information is gathered and documented, a staff report with funding recommendations is written and presented to the DNRC's director, for an official decision as to whether the project should receive emergency grant funding. Although no dollar limits are placed on individual projects, the limited total amount of funding available for the biennium dictates funding limits for individual projects be closely managed.

Project Management

Based on the decision of the DNRC' director, the sponsor is notified as to the status of its grant application. If successful, the sponsor and DNRC enter into a formal grant agreement, and the project is managed as with other grant agreements.

Emergency Grant Applications in Calendar Years 1993 and 1994

Of the ten requests, inquiries, and formal applications received during 1993 and 1994, investigations determined that six met the urgency and need criteria that has been established for the program.

Each emergency grant request submitted during 1993 and 1994 was reviewed by DNRC staff and, based on the staff's recommendation, was approved or denied for funding by the DNRC's director. Total funding for all emergency grants may not exceed the legislative biennial appropriation for emergency projects under the Renewable Resource Grant and Loan Program. Additionally, no emergency grant may be funded in excess of the biennial appropriation less the total of all emergency grants funded previously during the biennium.

Authorized Projects:

In 1993, the legislature authorized $125,000 for emergency grants. During the 1994-1995 biennium, emergency grant applications have included the following:

BUFFALO RAPIDS PROJECT IRRIGATION DISTRICT NO. 2
WDG-93-5103
$54,000

Emergency grant funds were authorized with advise of the Long Range Planning Sub-Committee of the Legislature during regular session in 1993. The project was completed in May 1993 and all authorized funds were spent. It was funded to replace deteriorated discharge lines which feed Buffalo Rapids Project Irrigation District's Fallon Unit.

SUN RIVER VALLEY SCHOOL DISTRICT 55F
WDG-93-5102
$10,874.93

Emergency grant funds were authorized with advise of the Long Range Planning Sub-Committee of the Legislature during regular session in 1993. The project was completed in July 1994 and $9,421.86 of the $10,874.93 authorized funds were spent. It was funded to allow the school district to respond to a DHES. To do so required the school district to install continuous disinfection for the water system at Sun River Middle School. Costs associated with a temporary chlorination system and bottled water were reimbursed in addition to the costs for installation of a treatment system.

LINCOLN CONSERVATION DISTRICT
WDG-93-5105
$2,262.00

Emergency grant funds were authorized by DNRC in March of 1993. The project was completed in July 1993 and all authorized funds were spent. Funds were used to cut a channel through a mud slide that crossed Big Cherry Creek and which if not removed may have caused serious flooding and damage to nearby households.

BROADVIEW, TOWN OF
WDG-93-5108
$16,000.00

Emergency grant funds were authorized by DNRC in 1993 to fund the Town of Broadview's well rehabilitation project. The project was completed in March 94 and $15,597.33 of the authorized $16,000.00 was spent.all grant funds were spent. It involved a preliminary study to determine why community water supply well was not functioning to capacity. Although the well had been of adequate capacity in the past, at the time of the emergency application the well was producing well below community need. After 12 hours of continuous pumping the flow was only 10 gallons per minute. After probing the well it was determined that the water table was adequate, therefore the problem was in the well. The pumps were pulled and the well casing perforated. It was found that some of pipe needed to be replaced. After the well casings were perforated and the pipe replaced, production in the well returned to normal.

TOWN OF THOMPSON FALLS
WDG-93-5109
$15,063.00

Emergency grant funds were authorized by DNRC in 1993. The project was completed and ????

An emergency grant for $25,000 was approved for the Town of Thompson Falls in June of 1993. The proceeds were applied toward the $40,000 construction costs to replace a portion of buried sewer main that had partially collapsed and was in immediate danger of total failure.

RESERVE SEWER DISTRICT
RRG-94-1019
$30,700.00

Emergency grant funds were authorized by DNRC in 1994. The project was completed in October 1994 and all of the funds authorized were spent. Funds were used to replace pumps in the District's sewer system lift station.

Projects Not Funded:

EAST GLACIER PARK GRADE SCHOOL

The East Glacier Park Grade School requested an emergency grant in May of 1994 to fund the installation of a filter system for the school water supply. An investigation concluded that a small filter system would not fulfill the mandates under which the community of East Glacier is being forced to comply by the Department of Health and Environmental Sciences, and the project was not funded.

CITY OF GLASGOW

The City of Glasgow applied for a grant in September, 1994, to fund a streambank stabilization project on the Milk River and alleviate the risk of a sewer main failure adjacent to the river. Because of inadequate financial need, an emergency grant was not awarded.

LINCOLN SEWER DISTRICT

The Lincoln Sewer District applied for emergency funds in April, 1994, to finance major improvements to its wastewater collection system. Because an investigation revealed that the improvements were not of an emergency nature, the project was not recommended for emergency funding, and the sponsor pursued a grant during the normal grant cycle.

CITY OF MILES CITY

The City of Miles City inquired as to the availability of emergency grant funds to replace and upgrade an old and leaking water transmission main across the Tongue River. An investigation concluded that the project was financially beyond the scope of the Emergency Grant Program and did not require immediate emergency action. It therefore did not qualify for funding under this program.

Emergency Grant Projects Previously Funded

DUPUYER SCHOOL DISTRICT
WDG-90-5090
$775.00

Emergency grant funds were authorized by DNRC in . The Project was completed in April 1991 and $708.55 of the authorized $775.00 was spent. Funds were used to install a chlorination system to disinfect the schools well water supply.

TOWN OF LODGE GRASS
WDG-91-5092
$5,747.61

Emergency grant funds were authorized by DNRC in 1991. The project was completed in April 1993 and $5,032.11 of the authorized $5,747.61 was spent. Funds were used to temporarily repair leaks in the town's water system. Subsequently other funding has been obtained to overhaul the water distribution system.

FAIRVIEW, TOWN OF
WDG-92-5098
$32,800.00

Emergency grant funds were authorized by DNRC in 1991. The project was completed in November 1992 and all authorized funds were spent. It was funded to replace a water well because existing wells were pumping sand. Sand in the water source would have damaged the new filter system installed with state grant funds. The Town of Fairview depleted their reserves constructing the filtration and disinfection plant and did not have the funds needed to replace the bad wells. Emergency grant funds were used to pay for a new well screen, casing, pump and motor. The test pump indicated that the aquifer would yield the designed 500 gallons per minute.

CHAPTER 6

SUMMARY OF 1989, 1991, AND 1993 GRANT PROJECTS FUNDED BY THE RENEWABLE RESOURCE GRANT AND LOAN PROGRAM

The status of all projects authorized in the prior three legislative sessions are reported here. Project status is reported in three categories:

A. Completed and/or closed grant projects.
B. Active grant projects.
C. Authorized projects not yet executed

Within each of these categories projects are listed alphabetically by the name of the grant recipient.

Completed and/or Closed Grant Projects:

BROADWATER CONSERVATION DISTRICT - IRRIGATION WATER MANAGEMENT DEMONSTRATION PROJECT
RRD-92-5553

A $100,000 grant was authorized by the Legislature in 1991. The project was completed in October 1994; all of the funds authorized were spent. Funds were used to develop a pilot demonstration irrigation water management project to improve the economics and environmental compatibility of irrigated agricultural operations through irrigation scheduling. Broadwater County has approximately 31,000 acres of sprinkler irrigation within its boundaries. Currently there are about 4,126 acres enrolled in the Toston Valley Irrigation Water Management Project representing 12 percent of the sprinkler-irrigated acres in Broadwater County. Twenty-five irrigators with an average of 113.5 acres per field participated in the pilot project. Participants realized water savings of 51.3 percent which amounts to about $9.23 per acre. Crop yields were comparable or better than yields achieved without irrigation water management.

CARBON CONSERVATION DISTRICT - ROCK CREEK DECREED WATER DISTRIBUTION MEASURING PROJECT
WDG-90-5085

A $30,000 grant was authorized by the Legislature in 1989. The project was completed in October 1994; $4,483.59 of the $30,000 authorized grant was spent. The purpose of the project was to encourage improved irrigation water management, ditch consolidation, and water conservation practices by offering financial assistance to Rock Creek Basin water users for the construction and installation of measuring structures at, or near, the irrigation diversion headgates. Funds were used to pay for half the cost of measuring devices installed by local irrigators. At the end of the grant period about 35 of the ditches on Rock Creek had measuring structures, including the 10 funded with grant funds. Previously about 18 ditches had measuring structures. With the grant the number of measured ditches was brought to 28; another 7 ditches were improved to meet the objective of the proposal without grant funds. The project sponsor indicated that the incentive was not enough to obtain the cooperation of all irrigators. It was not clear that water savings were achieved as a result of the project or that the number of measuring structures in place would serve to significantly improve management capability.

TOWN OF CIRCLE - MUNICIPAL WATER QUALITY IMPROVEMENT PROJECT
RRG-94-1001

A $36,000 grant was authorized by the Legislature in 1993. The project was completed in November 1994; $34,667.53 of the $36,000 authorized grant was spent. Circle has a population of 805. Its municipal water supply is served by two deep water wells placed in the Fox Hill Sands and contains high levels of fluoride, about twice the limit allowed by the DHES. The water also shows a high sodium and solids content. Funds were used to conduct a water treatment pilot study. The purpose of the study was to demonstrate that the water treatment process recommended in the December 1993 Water Treatment Master Plan, reverse osmosis (RO), was the appropriate treatment process for Circle's water source. Based on the data collected, reverse osmosis is a very effective process for removing fluoride and sodium from the raw water source. Throughout the pilot study, fluoride had an average removal rate of 97.6 percent and sodium had an average removal rate of 97.7 percent. This study has shown that the design recovery rate of 80 percent is appropriate and that a 15 percent blend is the most feasible blend ration for the system. Some additional post treatment will be needed to reduce the corrosiveness of the blended water. Overall, this study has concluded that reverse osmosis is an appropriate process.

CUSTER COUNTY - RECYCLING PROJECT
RRG-94-1014

A $4,725 grant was authorized by the Legislature in 1993. The project was completed in December 1994; all of the funds authorized were spent. Funds were used to purchase a recycling baler and a used forklift to expand the recycling efforts of Custer County and to increase the profitability of recycling cardboard. By increasing the bale size from 300 pounds to 1,000 pounds the price received per ton has doubled. New local landfill regulations dramatically increased the amount of cardboard recycled. Volume has increased from 38,500 pounds during the first quarter of the grant to close to 225,000 pounds in the second quarter. Part of the increase came because the new baler also allows Custer County to serve the recycling needs of communities in surrounding counties including: Terry, Jordan, and Colstrip.

DARBY SCHOOL DISTRICT NO 9 - DARBY SCHOOL PARK PROJECT
RRD-93-5559

A $25,300 grant was authorized by the Legislature in 1991. The project was completed in February 1994; all of the funds authorized were spent. A multiple purpose park was developed on 6.5 acres of land between elementary school and the high school. The project involved the installation of an automatic underground irrigation system, professional surveying and grading of the area, upgrading of an old well and pump system to supply the irrigation system, planting of a variety of shrubs and trees for use in science studies, and the purchase and installation of outdoor science equipment and specialized play-ground equipment.

TOWN OF DUTTON - STREAMBANK STABILIZATION PROJECT
WDG-92-5099

A $24,500 grant was authorized by the Legislature in 1989. The project was completed in May 1993; all of the funds authorized were spent. With DNRC, CDBG and FmHA funding Dutton riprapped an area around the Town's water source to prevent erosion from the river, installed a new storage tank and radio telemetry controls.

FLATHEAD JOINT BOARD OF CONTROL - FLATHEAD IRRIGATION INFORMATION SYSTEM PROJECT
WDG-92-5093

A $92,000 grant was authorized by the Legislature in 1991. The project was completed in May 1993; $91,000 of the $92,000 authorized grant was spent. It was funded to initiate an irrigation information system and gather data to provide information and education to the Flathead, Mission, and Jocko irrigation districts. The cost effectiveness of irrigated

agriculture operations in the Flathead River basin were to be impoved by the project. The project demonstrated that sprinkler irrigation in Montana presents significant potential for improving energy and water use efficiency.

FORT PECK RURAL COUNTY WATER DISTRICT - WATER ENGINEERING STUDY
RRG-94-1002

A $40,000 grant was authorized by the Legislature in 1993. The project was completed in November 1993; all of the funds authorized were spent. Funds were used to determine the costs, service area, and service level for a rural water system to serve an area west and north of the town of Fort Peck in southeast Valley County. Most residents in this area haul water due to the lack of a water-bearing formation underlying the region. The proposed project would serve about 250 to 300 residences, including the unincorporated areas of Park Grove, Wheeler, Duck Creek, the Fort Peck Lake cabins, and about 25 farms and ranches. Funds were used to prepare a preliminary engineering report for the newly formed district to provide an accurate assessment of funding needs; determine the feasibility and cost of providing service to the entire district; and choose the most cost-effective and efficient service level for the district's water users.

LEWIS & CLARK COUNTY - HYDROGEOLOGIC EVALUATION PROJECT
RRD-90-5530

A $100,000 grant was authorized by the Legislature in 1989. The project was completed in March 1993; all of the funds authorized were spent. It was funded to expand the data base which described the Helena Valley aquifer, to improve water quality monitoring, to perform two site specific water quality studies and to develop a predictive computer model of the aquifer system. A U.S. Geological Survey Water-Resource Investigations Report was prepared in cooperation with the Lewis and Clark City-County Health Department. The study showed that the aquifer system is relatively susceptible to potential contamination from surface or near-surface sources because the coarse-grained character of the near surface valley fill could readily allow infiltration.

LEWIS & CLARK COUNTY CONSERVATION DISTRICT - IRRIGATION WATER EFFICIENCY PROJECT
WDG-93-5100

A $100,000 grant was authorized by the Legislature in 1991. The project was completed in December 1993; $85,624.90 of the $100,000 authorized grant was spent. It was funded to pay for the lining of 9,200 feet of the East Outlet Canal of Nilan Ditch and to evaluate on-farm irrigation systems and management. A total of 8,300 feet of ditch were actually lined; on-farm evaluations were conducted for 18 of the 20 members of the Nilan Water Users Association.

LOWER MUSSELSHELL CONSERVATION DISTRICT - RIVER MANAGEMENT TOOLS PROJECT
WDG-92-5095

A $72,539 grant was authorized by the Legislature in 1991. The project was completed in December 1994; $72,314.96 of the $72,539 authorized grant was spent. The project was funded to provide a better means of managing stored water from Deadman's Basin during the irrigation season. Computer hardware and software to serve as a central repository for water use data was purchased and put into service. Problems with data collection and resulting higher costs to automate flow-related data meant that the purchase of data recorders and flumes to measure water flow in tributaries was not possible under the grant. Several tributaries are being monitored with recorders installed by DNRC in conjunction with the U.S. Bureau of Reclamation. The project has achieved its goals but is clearly an on-going effort with higher than anticipated costs.

MONTANA DEPARTMENT OF STATE LANDS - INTEGRATED FOREST RESOURCE INFORMATION PROJECT
RRD-91-5542

A $89,121 grant was authorized by the Legislature in 1989. The project was completed in August 1994; $89,005.15 of the $89,121 authorized grant was spent. Funds were used to develop a multi-resource analysis and geographic information system (MAGIS) which links forest inventory information; a timber growth model; a forest management prescription generator; timber value and cost information; road cost information; a road network generator; site-specific water and wildlife management targets; a map-based road and harvest scheduling model; and a geographic information system (GIS). With information from the GIS, the Multi-Resource Analysis component is used to solve a wide variety of natural resource management problems. The timber harvest/road scheduling part of the MAGIS will be used for timber sale planning. It will provide information to an inter-disciplinary team to help formulate alternatives and analyze the impacts of the alternatives.

MONTANA RURAL WATER SYSTEMS - TECHNICAL ADVISOR GRANT
WDG-92-5096

A $60,000 grant was authorized by the Legislature in 1989. The project was completed in August 1993; all of the funds authorized were spent. The project was part of an on-going effort to provide assistance to operators of rural water and sewer systems. The grant was used to match federal funds to provide training and technical assistance to rural water systems. With increased monitoring requirements, water and sewer system managers face increased responsibilities. Training for system managers was provided. One of the key demands for technical assistance occurred in emergency situations when water systems became contaminated or failed.

PARK CONSERVATION DISTRICT
PARK BRANCH SEDIMENT DIVERSION
WDG-90-5083

A $30,000 grant was authorized by the Legislature in 1989. All of the funds authorized were spent. Funds were provided to install submerged steel vanes in the main stream of the Yellowstone River to extend in staggered rows across the mouth of a side channel that serves as the inlet canal to the Park Branch Canal. The management of stream flow in this manner was designed to resolve a chronic perennial problem of sedimentation at the headgate of the Park Branch Canal. The diversion was installed and on-going monitoring is being conducted to determine the success of the installation.

CITY OF POLSON - WELLHEAD PROTECTION PROJECT
RRD-92-5550

A $76,055 grant was authorized by the Legislature in 1991. The project was completed in March 1994; all of the funds authorized were spent. Funds were used to prepare a wellhead protection plan for Polson's three municipal groundwater wells. Incidents of contamination in downtown Polson and the uncertainty of the continued use of surface water as a supplemental water supply caused City and County officials to become concerned about current and future groundwater quality. The wellhead protection plan assesses current threats to groundwater quality and provides information to safely site new wells, and develop strategies to eliminate or mitigate existing sources of contamination.

PRAIRIE COUNTY CONSERVATION DISTRICT - WATERSHED MANAGEMENT DEMONSTRATION PROJECT
WDG-90-5087

A $65,000 grant was authorized by the Legislature in 1989. The project was completed in November 1993; all of the

funds authorized were spent. It was funded to demonstrate irrigation water management practices that would improve return flow quality and reduce the amount of fertilizer needed for equivalent crop production.

SUN RIVER WATER USERS ASSOCIATION - SUN RIVER WATER SYSTEM STUDY PROJECT
WDG-93-5106

A $7,500 grant was authorized by the Legislature in 1991. The project was completed in February 1994; all of the funds authorized were spent. Funds were used to conduct a study to collect additional information regarding the quality and quantity of the springs and/or shallow ground water source proposed for as a community water use. The wastewater and well problems in Sun River, as well as the quality problems with the Sun River Valley School water supply were also evaluated.

WHITEFISH WATER AND SEWER DISTRICT
SWIFT CREEK STABILIZATION PROJECT
RRD-90-5539

A $73,440 grant was authorized by the Legislature in 1989. Efforts were made to secure claybanks to control excessive sedimentation in the Whitefish River. Large portions of the bank slid into the river and created a heavy sediment load that is washed down to the Whitefish lake. Demonstration sites were washed out during heavy spring run-off. Emergency funds were requested to secure these sites and partial funding was granted. The District was unable to provide an adequate cost share to secure the emergency funds offered and was not successful in obtaining additional grant funds in 1993. The project has been abandoned as a result.

YELLOWSTONE COUNTY - VALLEY CREEK STUDY PROJECT
RRD-92-5547

A $10,000 grant was authorized by the Legislature in 1989. The project was completed in August 1993; all of the funds authorized were spent. Funds were used to pay for a preliminary study to determine potential sites for and the economic benefits attainable from the development of a flatwater recreation area near Billings. It was determined that a significant amount of grant money would be needed to make the development feasible. Possible sources of funds were identified.

YELLOWSTONE COUNTY CONSERVATION DISTRICT - STREAMBANK REINFORCEMENT PROJECT
RRD-92-5548

A $100,000 grant was authorized by the Legislature in 1991. The project was completed in August 1993; all of the funds authorized were spent. The project encompassed the stabilization of 4,000 feet of highly unstable and eroding stream banks on Canyon Creek near Billings, Montana. Instead of using boulder rip-rap, rock jetties and tires to secure the banks, the demonstration restoration efforts incorporated soft engineering practices that utilized vegetation, organic erosion fabrics, stream bed manipulations and, in some reaches, intensive earth work to stabilize the eroding streambanks.

Active Grant Projects:

BUTTE-SILVER BOW GOVERNMENT - BLACKTAIL CREEK RESTORATION PROJECT
RRD-93-5558

A $100,000 grant was authorized by the Legislature in 1991. A grant agreement has been issued; funds have not yet been disbursed for the project. The project will restore a 6,000-foot section of Blacktail Creek on the stream reach from Harrison.

A request for proposal for engineering services was prepared. A notice will be published in the Montana Standard in

January. Selection will be made by a committee of individuals representing various agencies. The Project Sponsor must secure $18,000 in additional funding resources. The Project Sponsor expects to complete work that is more comprehensive than originally planned.

CHINOOK DIVISION IRRIGATION DISTRICT JOINT BOARD OF CONTROL - MILK RIVER WATER SUPPLY PROJECT
WDG-93-5104

A $100,000 grant was authorized by the Legislature in 1991. A grant agreement has been issued; funds have not yet been disbursed for the project. The 172 farms within the Chinook Irrigation Division Association comprise just over 38,000 irrigated acres of the 92,000-acre Milk River Irrigation Project. The project facilities are operated by the U.S. Bureau of Reclamation. Most of the facilities for the five irrigation districts that make up the Chinook Division were financed and constructed before 1911. Because many of the project structures are more than 70 years old, they have become obsolete, inefficient, and in some cases hazardous to project operators. The Chinook Division Irrigation Association intends to repair and replace some existing structures and add new structures as part of a basin-wide program to reduce chronic water shortages that have plagued the Milk River drainage.

CHINOOK DIVISION IRRIGATION DISTRICT JOINT BOARD OF CONTROL - MEASURING DEVICES
RRG-94-1012

A $34,217 grant was authorized by the Legislature in 1993. A grant agreement has been issued; funds have not yet been disbursed for the project. Funds were requested to install measuring devices at the headworks of each of the main canals of five irrigation districts to quantify the diversions into each system and provide a means of record keeping. The measuring devices will allow an equitable distribution of water within the Chinook Division Irrigation Association and will reduce the amount of water diverted from the Milk River. By using the measuring devices and controlling the diversions only to the amounts necessary, all distribution systems within the association will require less maintenance because they will not be degraded by excessive diversions.

CHINOOK DIVISION IRRIGATION DISTRICT JOINT BOARD OF CONTROL - REPAIR OF LOHMAN DAM
RRG-95-1021

A $36,173 grant was authorized by the Legislature in 1993. A grant agreement was executed in December 1994; funds have not yet been disbursed for the project. Funds will be used to rehabilitate Lohman Dam on the Milk River to ensure the dam's future reliability and eliminate excessive sand and silt diverted into the Fort Belknap Canal during irrigation season. The Chinook Diversion Irrigation Association proposes to replace the dam's spillway crest with a concrete ogee spillway. A gated sluiceway also will be constructed to help remove silt buildup behind the dam. An integral part of this project is the construction of a riprap jetty just upstream from the Fort Belknap Canal headworks.

TOWN OF DUTTON - WATER STORAGE RESERVOIR PROJECT
WDG-93-5107

A $91,319 grant was authorized by the Legislature in 1991. A grant agreement was executed in 1993; no funds have been disbursed for the project. This project provides replacement of a distribution line and is the continuation of Dutton's on-going effort to improve their water storage and distribution system. Work has been done to obtain necessary easements for the project. When easements have been secured, preliminary designs and plans will be submitted for approval, final designs will be prepared and bids advertised. Work will be completed in 1995.

EASTERN SANDERS CONSERVATION DISTRICT - ACCELERATED SOIL SURVEY ON FORESTLANDS
RRG-94-1010

A $99,000 grant was authorized by the Legislature in 1993. A grant agreement was executed in November 1993; $42,819.46 has been disbursed for the project. Funds were obtained to increase the staff dedicated to the mapping of soils in parts of Flathead and Lincoln Counties. Tasks include soil mapping, lab sampling and inventory, new series proposals, developing soil interpretations, and database maintenance. Work will be completed in the 1995 and 1996 field seasons.

EASTERN SANDERS CONSERVATION DISTRICT - LITTLE BITTERROOT RECHARGE ENHANCEMENT PROJECT
RRD-92-5556

A $86,300 grant was authorized by the Legislature in 1987 and re-authorized in 1991. A grant agreement was executed in June 1992; $53,274.57 has been disbursed for the project. This project was funded to re-evaluate and update the Lonepine and associated aquifers. The project involves re-evaluating and updating the data, and hydrogeologic interpretations of the Lonepine and associated aquifers since the hydrogeology was characterized in the early 1980's. The project will provide information to be used to determine whether artifical re-charge of the aquifer is feasible and how groundwater can be conserved to maintain aquifer levels.

TOWN OF EKALAKA - WATER SUPPLY AND STORAGE PROJECT
RRG-94-5563

A $49,975 grant was authorized by the Legislature in 1991. A grant agreement was executed in January 1994; $14,270.89 has been disbursed for the project. Project funds will be used to drill a new well and construct a new community water storage tank and to connect these to the existing water system.

FLATHEAD JOINT BOARD OF CONTROL - IRRIGATION ENHANCEMENT TO REDUCE EROSION AND IMPROVE WATER QUALITY
RRG-94-1017

A $44,500 grant was authorized in by the Legislature in 1993. A grant agreement was executed in May 1994; funds have not yet been disbursed for the project. Funds are to be used to solve irrigation wastewater disposal problems while improving water quality. The project proposes to replace 2 miles of open irrigation ditch with 4,000 feet of enclosed pipeline and three diversion and drop structures. To be consistent with contingencies placed on the project by the Legislature, the first step of the project requires that all necessary permits be identified and obtained and that an Environmental Assessment be prepared. In the process of obtaining permits and preparing the Environmental Assessment the project sponsor must contact all affected groups to gain their participation.

GLASGOW IRRIGATION DISTRICT
IMPROVING WATER-USE EFFICIENCY PROJECT
WDG-92-5094

A $100,000 grant was authorized by the Legislature in 1991. A grant agreement was executed in October 1991; $100,000 has been disbursed for the project. The Glasgow Irrigation District encompasses approximately 18,000 acres of irrigable land. The irrigation facilities that serve this district were constructed from 1915 to 1917, many of the canals and other facilities are in need of rebuilding and rehabilitation. Water for irrigation is obtained from the Milk River. A previous study indicated that over 30 miles of canal and laterals should be rehabilitated in order to prevent the seepage losses that occurred at the time of the application for grant funds. The grant provided cost share for a U.S. Bureau of Reclamation Rehabilitation and Betterment loan. The total project cost was estimated at $2.2 million and included funds

to line 22 miles of laterals with slip form concrete or buried PVC lining, eight miles of Vandalia Canal with compacted earth. In addition funds were provided to rehabilitate, extend or construct 48 miles of drains.

All work funded by DNRC has been completed; the project sponsor continues to report on the work done with matching funds.

GLASGOW IRRIGATION DISTRICT - SYSTEM REHABILITATION PHASE II, INSTALLATION OF FARM DELIVERY HEADGATE MEASURING DEVICES
RRG-94-1011

A $50,000 grant was authorized by the Legislature in 1993. A grant agreement was executed in October 1993; $25,934.50 has been disbursed for the project. This proposal was made as a continuation of a Rehabilitation and Betterment program under which Phase I was funded by a $2.0 million U.S. Bureau of Reclamation Rehabilitation and Betterment (R&B) loan and a $100,000 DNRC grant. Phase I funding provided the pre-casting of farm delivery headgate inlet/outlet structures *but excluded the installation.* Inlet/outlet structures have deteriorated to the point where accurate, efficient water measurement and water delivery is not possible. With this grant, 100 of the 300 structures will be replaced with structures funded and approved by the U.S. BUREC.

JEFFERSON VALLEY CONSERVATION DISTRICT - CEREAL-LEGUME CROP ROTATIONS PROJECT
RRD-92-5554

A $48,677 grant was authorized by the Legislature in 1991. A grant agreement was executed in April 1992; $33,958.19 has been disbursed for the project. Funds have been used to demonstrate the benefits of alternative cropping rotations, incorporating annual and perennial legume/pulse crops, to southwest Montana agricultural producers. Benefits include energy savings, reduced soil erosion, and enhanced soil productivity, water use efficiency, and farm profitabiltiy.

LIBERTY COUNTY CONSERVATION DISTRICT - SWEETGRASS HILLS GROUNDWATER STUDY PROJECT
RRD-93-5560

A $100,000 grant was authorized by the Legislature in 1991. A grant agreement was executed in July 1993; $46,531.56 has been disbursed for the project. Funds were provided to conduct a baseline assessment of groundwater resources in an eight township area south of East Butte in the Sweetgrass Hills of northcentral Liberty County. Data has been completed during the past two field seasons; additional data will be collected during 1995. A final report is due in 1996.

LITTLE BEAVER CONSERVATION DISTRICT - LITTLE AND LOWER MISSOURI RIVER WATER RESERVATIONS DEVELOPMENT AND IMPLEMENTATION
RRG-94-1003

A $47,318 grant was authorized by the Legislature in 1993. A grant agreement was executed in August 1993; $45,475.33 has been disbursed for the project. Funds were provided to pay for technical and legal assistance to eleven conservation districts during the Little and Lower Missouri River Basin Water Reservation proceedings.

MALTA IRRIGATION DISTRICT - IMPROVING WATER EFFICIENCY ON DODSON SOUTH CANAL
RRG-94-1004

A $50,000 grant was authorized by the Legislature in 1993. A grant agreement was executed in September 1993; $9,402.56 has been disbursed for the project. Funds were provided to replace eight check structures located in the Dodson South Canal. The new structures (10-foot wide openings will replace 5-foot openings) will have automated gates that can better handle the spring ice jams, which will enable more water to be captured earlier in the spring for irrigation

and improved delivery. This will allow the project sponsor to divert the early spring runoff into Nelson Reservoir for use later in the season. It is important that Nelson Reservoir be filled earlier in the spring because the Piping Plover bird, an endangered species, nests during May and June on the water's edge. Filling the reservoir at this later time would flood the nests and ruin any chance of a hatch for that year. Work is conducted during periods when the irrigation ditch is dewatered, weather permitting. Approximately 20 percent of the work has been completed for this project.

MISSOULA COUNTY - LINDA VISTA SEWER INCEPTOR
RRG-94-1008

A $100,000 grant proposal was introduced on the floor during the 1993 session and authorized by the Legislature. A grant agreement was executed in June of 1994; no funds have been disbursed for the project. Funds will be used to encourage homeowners to abandon on-site sewage disposals systems and to connect to public sewer.

MISSOULA COUNTY CONSERVATION DISTRICT - IRRIGATION DIVERSION ALTERNATIVES PROJECT
RRD-94-5562

A $85,250 grant was authorized by the Legislature in 1991. A grant agreement was executed in September 1993; no funds have been disbursed for the project. Funds will be used to research alternative diversion designs, to select and finalize a design with consideration to urban expansion, riverfront development and agriculture uses and to implement and complete construction of the selected diversion design.

MONTANA DEPARTMENT OF NATURAL RESOURCES AND CONSERVATION - BEAVERHEAD GROUNDWATER STUDY PROJECT
RRD-92-5551

A $100,000 grant was authorized by the Legislature in 1991. An agreement was executed in April 1992; $31,885.94 has been disbursed for the project. Funds were provided to study groundwater yields and interaction with surface water in Beaverhead County. The 100 square mile area of study includes the alluvial fans and floodplains along Rattlesnake Creek west and southwest of Dillon and Blacktail Deer Creek drainage south of Dillon. Past groundwater studies of the region have been only site-specific and superficial in nature. This study will provide a detailed understanding of the groundwater system. The information will allow DNRC to estimate the volume of water in storage in the aquifer and the rates and general locations of aquifer recharge and discharge.

MONTANA DEPARTMENT OF NATURAL RESOURCES AND CONSERVATION - STUDY OF THE CHARACTERISTICS OF EXTREME PRECIPITATION EVENTS IN MONTANA
RRG-94-1009

A $100,000 grant was authorized by the Legislature in 1993. A grant agreement was executed in October 1993; $53,100 has been disbursed for the project. Funds are being used to develop a frequency-based criteria for computing inflow design floods for Montana dams. As a result of the study DNRC anticipates that design standards to meet Dam Safety Act requirements may be reduced.

MONTANA DEPARTMENT OF NATURAL RESOURCES AND CONSERVATION - FLATHEAD VALLEY COOPERATIVE GROUNDWATER STUDY
RRG-94-1016

A $100,000 grant was authorized by the Legislature in 1993. A grant agreement was executed in June 1994; $586.75 has been disbursed for the project. Funds are being used to develop a detailed technical framework for responsible groundwater management in the Kalispell area.

MONTANA DEPARTMENT OF STATE LANDS - PILOT URBAN FORESTRY PROJECT
RRD-91-5543

A $60,000 grant was authorized by the Legislature in 1989. A grant agreement was executed in August 1991; $46,723.15 has been disbursed for the project. Funds were requested to assist communities in the seven-county Headwaters Resource, Conservation and Development area develop urban forestry programs. In nine communities 1082 new street and park trees have been planted. Final planting will occur in 1996 to complete the project.

MONTANA DEPARTMENT OF STATE LANDS - REFORESTATION PROJECTS ON STATE LANDS
RRG-94-1006

A $60,000 grant was authorized by the Legislature in 1993. A grant agreement was executed in February 1994; no funds have been disbursed for the project. Funds were provided to pay for reforestation on 463 acres of state owned lands in northwestern Montana. These sites were harvested between 1987 and 1990, had not been reforested, and likely would have remained non-stocked or poorly stocked without treatment. Currently trees for the project are being grown.

MONTANA STATE LIBRARY - DROUGHT MONITORING SYSTEM PROJECT
WDG-92-5097

A $58,364 grant was authorized by the Legislature in 1991. A grant agreement was executed in October 1991; $53,811.45 has been disbursed for the project. Funds were provided to improve drought monitoring in Montana and to develop a new Montana Drought Plan. The Drought Monitoring System began its third year of operation February 15, 1994; it has been a great success. Prior to the project there was no mapping and electronic distribution of drought information in Montana. Response to the system from the Drought Advisory Committee has been very positive and the map products have proven to be useful tools. Steps have been taken to secure on-going funding for the Drought Monitoring Center.

MONTANA STATE UNIVERSITY, MONTANA WATER COURSE - PUBLIC EDUCATION IN WATER MANAGEMENT PROJECT
RRD-92-5552

A $100,000 grant was authorized by the Legislature in 1991. A grant agreement was executed in May 1992; $57,699.27 has been disbursed for the project. Funds were requested to provide Montana citizens with timely information on the management and use of water resources. A variety of teaching methods have been used to provide the public with unbiased facts behind complex water management policies and water use issues to develop public ownership in water management decision making. Efforts to inform the public will continue into 1995.

PHILLIPS CONSERVATION DISTRICT
MOISTURE MONITORING PROJECT
RRG-95-1022

A $53,382 grant was authorized by the Legislature in 1991. A grant agreement was executed in October 1994; no funds have been disbursed for the project. The Phillips Conservation District submitted an application requesting funds to provide producers with accurate information concerning the capabilities and limitations of their climatic region, soil types, and water movement and availability. Funds will be used to identify areas with high salt content in the soil and to encourage better management of water use in crop production to reduce the problem.

RAVALLI COUNTY, BOARD OF COMMISSIONERS
RAVALLI COUNTY GROUNDWATER VULNERABILITY ASSESSMENT
RRG-94-1018

A $70,762 grant was authorized by the Legislature in 1993. A grant agreement was executed in July 1994; no funds have been disbursed for the project. Funds will be used to map areas of relative groundwater pollution on nonfederally owned lands in Ravalli County. Resulting maps will be used to plan and make decisions concerning land use and water-related develop in the county.

RICHLAND COUNTY
LONETREE DAM EVALUATION AND DESIGN
RRG-94-1007

A $60,300 grant was authorized by the Legislature in 1993. A grant agreement was executed in November 1993; $22,942.03 has been disbursed for the project. Funds are being used to evaluate the options available to bring the Lone Tree dams into compliance with the Dam Safety Act. When they were constructed 35 years ago, the dams were intended to provide irrigation for adjacent farm land. Following construction of the dams, however, considerable development took place downstream. As a result of this development, the dams were classified as high-hazard by the Corps of Engineers and now require extensive modification in order to comply with Dam Safety Act regulations. The dams have long provided flood protection to City of Sidney and Richland County residents. Because the dams must be either permitted or breached by July 1, 1995, the proposed study will help all parties involved reach a decision on the best course off action to take to bring the dams into compliance with current laws.

RUBY VALLEY CONSERVATION DISTRICT
UPPER RUBY WATER DEVELOPMENTS AND RIPARIAN AREA IMPROVEMENTS
RRG-94-1005

A $100,000 grant was authorized by the Legislature in 1993. A grant agreement was executed in September 1993; $31,511.50 has been disbursed for the project. Funds were obtained to make range improvements on the Upper Ruby Cattle and Horse Allotment. These improvements are designed to decrease livestock use on riparian areas while simultaneously increasing the use of uplands to improve riparian conditions. In 1986, overgrazing apparently had seriously degraded the riparian area. In 1991, Governor Stephens appointed a task force to resolve the controversy. As a result of all the public participation, the Forest Service prepared an environmental impact statement (EIS). The EIS examined 10 alternatives, and Ruby Valley Conservation District proposed to implement "Alternative J," the Forest Service-preferred alternative. To implement this alternative, 29 offstream watering sites and 11 miles of fence will be installed. In addition, the permittees will provide three range riders to ensure that livestock are properly distributed. As a result, this project will serve as a model to demonstrate to the nation the benefits of livestock grazing combined with sound environmental practices.

STILLWATER CONSERVATION DISTRICT
Evaluation of Plastic Lining Project
RRD-93-5557

A $56,848 grant was authorized by the Legislature in 1991. A grant agreement was executed in May 1993; $51,163.20 has been disbursed for the project. Funds are being used to line a 4,000 section of the Cove Ditch canal using a less costly, effective and durable alternative to conventional ditch liners. The material is the same material tested under an earlier program grant. Installation of the lining material at this site provides another opportunity to evaluate its use and effectiveness.

STOCKETT WATER USERS ASSOCIATION

WASTE WATER COLLECTION AND TREATMENT PROJECT
WDG-94-5110

A $50,000 grant was authorized by the Legislature in 1991. A grant agreement was executed in February 1994; $36,628 has been disbursed for the project. Funds were provided to construct a new wastewater collection system to replace the existing system.

THREE FORKS, TOWN OF
WATER SYSTEM IMPROVEMENTS PROJECT
RRD-93-5561

A $100,000 grant was authorized by the Legislature in 1991. A grant agreement was executed in June 1993; $90,000 has been disbursed for the project. Funds were provided to improve the community's drinking water system and are being used well construction, well controls and delivery piping.

TOWN OF WINNETT - WINNETT SEWER RECONSTRUCTION AND REHABILITATION
RRG-94-1015

A $50,000 grant was authorized by the Legislature in 1993. A grant agreement was executed in April 1994; $40,113 has been disbursed for the project. Funds are being used to help preserve the quality of water McDonald Creek and protect local area groundwater from present and future contamination by the town's sewer system.

YELLOWSTONE COUNTY
YELLOWSTONE RIVER PROJECT
RRG-94-1013

A $50,000 grant was authorized by the Legislature in 1993. A grant agreement was executed in February 1994; no funds have been disbursed for the project. Funds were obtained to support the development of areas along the Yellowstone River near billings for recreational use.

Authorized Projects Not Yet Executed:

FORT SHAW IRRIGATION DISTRICT - REHABILITATION OF HEADWORKS & "A" SYSTEM PROJECT
91FS000

A $50,000 grant was authorized in 1991. A grant submitted by the Fort Shaw Irrigation District was authorized by the Legislature in 1991. No grant agreement has been issued; funds have not yet been disbursed for the project.
The project was proposed to construct a jetty in the Sun River and to install new gates in the irrigation water diversion structures. A 3,500 diversion pipe to carry irrigation water at a rate of 80 cubic feet per second was also proposed. The Project Sponsor anticipated additional funding from the U.S. Bureau of Reclamation. The U.S. Bureau of Reclamation no longer has a program to provide the funding needed and as a result Fort Shaw Irrigation District had inadequate funds to complete the project proposed. In 1995, the District will seek a change in the legislative authorization to reduce the scope of the project proposed and to provide the additional funding needed in a loan.

FORT SHAW IRRIGATION DISTRICT - REHABILITATION AND BETTERMENT STUDY PROJECT
FS000

A $50,000 grant was authorized in 1991. A grant submitted by the Fort Shaw Irrigation District was authorized by the Legislature in 1991. No grant agreement has been issued; funds have not yet been disbursed for the project.
The project was proposed to conduct a Rehabilitation and Betterment Study to meet requirements to qualify for a U.S.

Bureau of Reclamation Rehabilitation and Betterment loan. Funds under the U.S. Bureau of Reclamation program are no longer available. In 1995, the District will seek a change in the legislative authorization to allow them to use these funds for a construction project in conjunction with other grant and loan funds authorized.

TOWN OF HOT SPRINGS - CAMAS THERAPY CENTER
93HS000

A $150,000 GRANT grant was authorized in 1993. A grant submitted by the Town of Hot Springs was authorized by the Legislature in 1993. A draft grant agreement has been issued; funds have not yet been disbursed for the project. Funds were requested to rebuild the abandoned Tribal Bathhouse into a modern, hot water therapy. The Camas Therapy Center will offer physical rehabilitation, therapy programs, and health care through the use of hot mineral water and related, medically approved disciplines.

MEAGHER COUNTY CONSERVATION DISTRICT - SOUTH SIDE CANAL LINING PROJECT
ME000

A $37,500 grant was authorized in 1991. A grant submitted by the Meagher County Conservation District authorized by the Legislature in 1991. No grant agreement has been issued; funds have not yet been disbursed for the project. The project was proposed to line areas in a 15,000 section of the South Side Canal in Meagher County. The total cost of the project was estimated at $150,000.00 with the applicant and the ASCS each committing $25,000.00. A grant for 25 percent of the total project cost but not more than $37,500.00 was authorized. A loan was also authorized but would not be issued unless the South Side Canal Company formed an irrigation district eligible to incur public debt.

MONTANA DEPARTMENT OF NATURAL RESOURCES AND CONSERVATION - BATTLE CREEK STORAGE UNIT PROJECT

A $37,500 grant was authorized in 1991. A grant submitted by the Water Resources Division of DNRC was authorized by the Legislature in 1991. No grant agreement has been issued; funds have not yet been disbursed for the project. Funds were requested to cost share the expense of developing additional water storage along Battle Creek. No activity is pending.

RUBY WATER COMPANY - DAM FEASIBILITY STUDY PROJECT

A $14,708 grant was authorized in 1991. A grant submitted by the Ruby Water Company was authorized by the Legislature in 1991. No grant agreement has been issued; funds have not yet been disbursed for the project. Funds were requested to study the feasibility of constructing a moderate-size irrigation dam. Because the applicant was a private entity only 25 percent of the study cost, up to $14,708, was authorized. No activity is pending.

BUTTE-SILVER BOW LOCAL GOVERNMENT - MUNICIPAL COMPOST PRODUCTION FROM YARD WASTE AND SLUDGE
93BU000

A $50,000 grant was authorized in 1993. A grant submitted by the Butte-Silver Bow Local Government was authorized by the Legislature in 1993. No grant agreement has been issued; funds have not yet been disbursed for the project.

DODSON IRRIGATION DISTRICT - IMPROVING WATER USE EFFICIENCY
93DO000

A $31,569 grant was authorized in 1993. A grant submitted by the Dodson Irrigation District was authorized by the Legislature in 1993. No grant agreement has been issued; funds have not yet been disbursed for the project. Funds will

be used to replace 3,900 feet of old canal with 1,400 feet of plastic pipe to eliminate seepage from the canal to conserve water. Information about the process to obtain a loan under the program was provided in November 1993.

EAST GLACIER WATER AND SEWER DISTRICT - MIDVALE DIVERSION STRUCTURE
93EG000

A $25,905 grant was authorized in 1993. A grant submitted by the East Glacier Water and Sewer District was authorized by the Legislature in 1993. This project had a prior grant was one able to implement the project because it was necessary to negotiate access with the tribe. At this time no grant agreement has been issued; funds have not yet been disbursed for the project.

TOWN OF ENNIS - WATER STORAGE AND DISTRIBUTION SYSTEM IMPROVEMENTS
93EN000

A $100,000 grant was authorized in 1993. A grant submitted by the Town of Ennis was authorized by the Legislature in 1993. No grant agreement has been issued; funds have not yet been disbursed for the project.

GREENFIELDS IRRIGATION DISTRICT - GRAVITY SPRINKLER PLANNING PROJECT
91GR000

A $100,000 grant was authorized in 1991. A grant submitted by the Greenfields Irrigation District was authorized by the Legislature in 1991. No grant agreement has been issued; funds have not yet been disbursed for the project. Funds were requested to plan and design gravity pressurized sprinkler systems. The district planned to apply to the U.S. Bureau of Reclamation for construction funds through the Pick-Sloan Program. There has been no activity on the project.

HILGER COUNTY WATER AND SEWER DISTRICT - SEWAGE AND COLLECTION TREATMENT FACILITIES
93HI000

A $50,000 grant was authorized in 1993. A grant submitted by the Hilger County Water and Sewer District was authorized by the Legislature in 1993. No grant agreement has been issued; funds have not yet been disbursed for the project.

HILL COUNTY - SALINITY CONTROL PROJECT
93HC000

A $50,000 grant was authorized in 1993. A grant submitted by Hill County was authorized by the Legislature in 1993. No grant agreement has been issued; funds have not yet been disbursed for the project.

HUNTLEY WATER AND SEWER DISTRICT - WATER SYSTEM REHABILITATION
93HU000

A $100,000 grant was authorized in 1993. A grant submitted by the Huntley Water And Sewer District was authorized by the Legislature in 1993. No grant agreement has been issued; funds have not yet been disbursed for the project.

TOWN OF NASHUA - WATER STORAGE SYSTEM IMPROVEMENTS
93NA000

A $50,000 grant was authorized in 1993. A grant submitted by the Town of Nashua was authorized by the Legislature in 1993. No grant agreement has been issued; funds have not yet been disbursed for the project.

ROOSEVELT COUNTY CONSERVATION DISTRICT - RECREATIONAL ENHANCEMENT OF MISSOURI RIVER
93RO000

A $7,000 grant was authorized in 1993. A grant submitted by the Roosevelt County Conservation District was authorized by the Legislature in 1993. No grant agreement has been issued; funds have not yet been disbursed for the project.

TOWN OF RYEGATE
RYEGATE WATER SYSTEM IMPROVEMENT PROJECT
93RY000

A $50,000 grant was authorized in 1993. A grant submitted by the Town of Ryegate was authorized by the Legislature in 1993. No grant agreement has been issued; funds have not yet been disbursed for the project.

YELLOWSTONE COUNTY - SHEPHERD RURAL WATER SYSTEM DEVELOPMENT
93YS000

A $75,000 grant was authorized in 1993. A grant submitted by Yellowstone County was authorized by the Legislature in 1993. No grant agreement has been issued; funds have not yet been disbursed for the project.

Figure 6.1

FUNDING INFORMATION FOR RENEWABLE RESOURCE GRANT AND LOAN PROJECTS AUTHORIZED IN 1993, 1991, AND 1989

PROJECT SPONSOR--Project Title	APPROPRIATED AMOUNT	CONTRACTED AMOUNT	AMOUNT DISBURSED
1993 Legislature - Renewable Resource Grant and Loan Program			
MALTA IRRIGATION DIST.--Water Use Efficiency Improvements	$ 50,000	$ 50,000	$ 9,402
RICHLAND COUNTY--Dam Evaluation and Design	60,300	60,300	17,340
DNRC/WATER RESOURCES--Characteristics of Extreme Precipitation	100,000	100,000	53,100
RYEGATE, TOWN OF--Water System Improvement	50,000		
YELLOWSTONE COUNTY--Yellowstone River Project	50,000	50,000	
BUTTE-SILVER BOW LOCAL GOV.--Municipal Compost Production	50,000	50,000	
DEPT OF STATE LANDS--Reforestation Projects on State Lands	60,000	60,000	
HUNTLEY WATER AND SEWER DIST.--Water System Rehabilitation	100,000		
RUBY VALLEY CD--Upper Ruby Riparian Area Improvements	100,000	100,000	31,511
WINNETT, TOWN OF--Sewer Reconstruction and Rehabilitation	50,000	50,000	
FORT PECK RURAL WATER DISTRICT--Water Engineering Study	40,000	40,000	36,000
EAST GLACIER WATER AND SEWER DIST.--Midvale Diversion Structure	25,905		
NASHUA, TOWN OF--Water Storage System Improvements	50,000		
CHINOOK DIV. IRR. ASSOC.--Irrigation Water Measuring Devices	34,217	34,217	
CHINOOK DIVISION IRRIGATION ASSOC--Repair of Lohman Dam	36,173	36,173	
CUSTER COUNTY--County Recycling Project	4,725	4,725	4,050
CIRCLE, TOWN OF--Water Quality Improvement Project	36,000	36,000	30,840
EASTERN SANDERS CD--Accelerate Soil Survey on Forestlands	99,000	99,000	42,819
HOT SPRINGS, TOWN OF--Camas Therapy Center	150,000		
GLASGOW ID--Installation Headgate Measuring Devices	50,000	50,000	14,981
HILGER CO WATER AND SEWER DIST.--Sewage and Collection Treatment	50,000		
DNRC/WATER RESOURCES--Flathead Valley Coop Groundwater Study	100,000	100,000	
LITTLE BEAVER CD--Water Reservations Implementation	47,318	47,318	19,132
RAVALLI COUNTY--Groundwater Vulnerability Assessment	70,672	70,672	

YELLOWSTONE COUNTY--Rural Water System Development	75,000		
HILL COUNTY--Salinity Control Project	50,000		
ROOSEVELT CO CD-Recreational Enhancement of Missouri River	7,000		
DODSON IRRIGATION DISTRICT-Water Use Efficiency Improvements	31,569		
FLATHEAD JOINT BOARD OF CONTROL--Fish Friendly Irrigation	44,500	44,500	
ENNIS--Water Storage and Distribution System Improvements	100,000		
MISSOULA COUNTY--Linda Vista Sewer Inceptor Project	100,000	100,000	
THOMPSON FALLS--Sewer Main Repairs--EMERGENCY GRANT		9,937	3,567
BROADVIEW--Rehab of Well and Hauling of Water--EMERGENCY GRANT		6,000	5,597
RESERVE WATER AND SEWER DIST.--Upgrade Sewer System--EMERGENCY		30,700	30,700
TOTAL	1,872,379	1,229,542	268,342

1991 Legislature - Water Development Grants

CHINOOK IRRIGATION DISTRICT--Milk River Water Supply	100,000	100,000	
LOWER MUSSELSHELL CD--River Management Tools	72,539	72,539	65,215
GLASGOW IRRIGATION DISTRICT--Improving H20 Use Efficiency	100,000	100,000	100,000
GREENFIELDS IRRIGATION DIST.--Gravity Sprinkler Planning	100,000		
MONTANA STATE LIBRARY--Drought Monitoring System	58,364	58,364	53,811
FLATHEAD JOINT BRD OF CONTROL--Flathead Irrig Info System	92,000	92,000	91,000
LEWIS & CLARK CO. CD--Nilan Water Conservation Project	100,000	100,000	85,624
RUBY WATER COMPANY--Ruby Creek Dam Feasibility Study	14,708		
STOCKETT H20 USERS ASSOC--Wasteh20 Collection & Treatment	50,000	50,000	
FORT SHAW IRRIGATION DIST--Rehab Headworks & "A" System	50,000		
DUTTON--Water Storage Reservoir	91,319	66,319	
PHILLIPS CONSERVATION DIST--Moisture Monitoring Project	53,382	53,382	
SUN RIVER WATER USERS ASSOC--Sun River Water System	7,500	7,500	7,500
FAIRVIEW--New Water Well Drilling Project--EMERGENCY GRANT		32,800	32,800
BUFFALO RAPIDS PROJECT IRRIGATION DISTRICT #2--Replace Discharge Lines, Fallon Unit--EMERGENCY GRANT		54,000	54,000
SUN RIVER VALLEY SCHOOL DISTRICT 55F--Temporary Chlorination System & Bottled Water--EMERGENCY GRANT		10,874	9,421

LINCOLN CONSERVATION DISTRICT--Flood Control, Big Cherry Creek--EMERGENCY GRANT		2,262	2,262
BROADVIEW--Rehab of Well & Hauling of Water--EMERGENCY		10,000	10,000
THOMPSON FALLS--Sewer Main Repairs--EMERGENCY GRANT		15,063	15,063
TOTALS	889,812	825,103	526,699
1991 Legislature - Renewable Resouce Development Grants			
YELLOWSTONE CO CONSERVATION DIST--Streambank Reinforcement	100,000	100,000	100,000
JEFFERSON VALLEY CD--Cereal-Legume Crop Rotations	48,677	48,677	28,747
NEIHART--Water System Improvements	50,000	0	0
EKALAKA--Water Supply and Storage Project	49,975	49,974	
MSU, MWRC--Public Education in Water Management	100,000	100,000	57,699
STILLWATER CD--Evaluation of Plastic Lining & Fabrication	56,848	56,848	35,500
BROADWATER CD--Irrigation H20 Management Demonstration	100,000	100,000	92,170
DNRC, WATER MANAGEMENT--Beaverhead Co. Groundwater Study	100,000	100,000	31,885
POLSON--Wellhead Protection Program	76,055	76,055	76,055
THREE FORKS--Water System Improvements	100,000	100,000	
FORT SHAW IRRIGATION DISTRICT--Rehab & Betterment Study	50,000		
GOV'T OF BUTTE-SILVER BOW--Blacktail Creek Restoration	100,000	100,000	
LIBERTY CO CD--Sweetgrass Hills Groundwater Study	100,000	100,000	38,458
MISSOULA COUNTY CD--Irrigation Diversion Alternatives	85,250	85,250	
FALLON CO.--Baker Lake Erosion Control & Recreation Path	15,361	0	0
DARBY SCHOOL DISTRICT NO. 9--Darby School Park Project	25,300	25,300	25,300
MEAGHER COUNTY CONSERVATION DIST--South Side Canal Lining	37,500		
DNRC--Battle Creek Storage Unit (Direct Appropriation)	82,000		
TOTALS	1,276,966	1,042,104	485,816
1989 Legislature - Water Development Grants			
DALY DITCH ID--Republican West Diversion Replacement	100,000	0	0
MT RURAL WATER SYSTEMS--Water System Technical Advisor	60,000	60,000	60,000
BEAVERHEAD & MILE HIGH CD--Big Hole River Channel Stabil.	18,400	18,400	18,400
PRAIRIE CO. CD--Watershed Demonstration Management Pract.	65,000	65,000	65,000
CARBON CD--Rushwater Creek Erosion Control	100,000	0	0

EASTGATE VILLAGE W/S--Wastewater Pond Effluent Irrigation	25,000	25,000	25,000
CARBON CD--Rock Creek Decreed Water Distribution	30,000	30,000	4,483
HUNTLEY PROJECT ID--Main Canal Measuring & Flow Control	44,268	0	0
DUTTON--Streambank Stabilization Project	24,500	24,500	24,500
POPLAR--Water Treatment Facility	50,000	50,000	50,000
PARK CD--Park Branch Sediment Diversion	30,000	30,000	30,000
SHERIDAN COUNTY--Carroll Dam Feasibility Study	84,500		
DUPUYER SCHOOL DISTRICT--Chlorination--EMERGENCY GRANT		775	708
LODGE GRASS--Water Lines--EMERGENCY GRANT		5,747	5,032
BUTTE-SILVER BOW--Clark Fork Coordinator	100,000	100,000	100,000
TOTALS	731,668	409,422	383,124

1989 Legislature - Renewable Resource Development Grants

GALLATIN CD--East Gallatin State Recreation Area	100,000	100,000	100,000
FLATHEAD BASIN COMMISSION--Forest Practices/H20 Quality	25,000	25,000	24,837
MT STATE LIBRARY--MT National Resource Information System	99,806	99,806	99,806
MT STATE LIBRARY--Montana Water Information System	45,510	45,510	45,510
MT STATE LIBRARY--Montana Natural Heritage Program	99,450	99,450	99,450
UNIVERSITY OF MONTANA--Management Guidelines/Riparian Site	41,773	41,773	41,773
DEPT. OF AGRICULTURE--Monitor Ag Chemicals in GroundH20	93,550	93,550	90,303
LEWIS & CLARK CO.--Hydrogeologic Evaluation/Helena Valley	100,000	100,000	100,000
BELGRADE--Meter Installation & Water Main Replacement	50,000	50,000	50,000
HYSHAM--Water System Improvement Project	50,000	50,000	50,000
WHITEFISH H20/SEWER--Swift Creek Clay Banks Stabilization	73,440	73,440	73,194
EAST GLACIER H20/SEWER DIST--Midvale Creek Diversion	40,000	0	0
YELLOWSTONE CO--Valley Creek/Calamity Jane Study	10,000	10,000	10,000
DSL--Integrated Forest Resource Information	89,121	89,121	89,005
COLUMBIA FALLS--Water Master Plan Phase II	20,000	20,000	20,000
MISSOULA COUNTY--Emergency Response/Aquifer Protection	45,000	45,000	45,000
MSU/EARC--Groundwater Nitrates Under Irrigable Ag Land	10,700	10,700	10,700
DNRC-CDD--Water Reservation Development Program	32,000	32,000	32,000
GREEN MOUNTAIN CD--Fire Hydrants for Trout Cr. H20 System	18,720	18,720	18,720
LAKESIDE WATER DIST--Stoner Creek Road & Woodacres Main	28,500	0	0
DSL--Pilot Urban Forestry Project	60,000	60,000	46,723
TOTALS	1,132,570	1,064,070	1,047,023

CHAPTER 7

SUMMARY OF PUBLIC LOAN PROJECTS FUNDED BY THE RENEWABLE RESOURCE GRANT AND LOAN PROGRAM

Executed Loans as of November 1994

ID Number	Type	Applicant	Balance Due	Closing	Termination
WDL-86-3050	CST	ANACONDA-DEER LODGE COUNTY	380,568.17	01/08/1986	01/20/2006
WDL-93-3160	CST	BEAVERHEAD CO/RED ROCK W & S	2,436,013.94	08/06/1992	07/02/2112
WDL-85-3015	CST	BELGRADE CITY OF	577,533.30	01/21/1985	01/21/2005
WDL-85-3043	CST	BITTERROOT IRRIGATION DISTRICT	959,445.81	09/17/1985	02/17/2016
WDL-91-3149	CST	BOZEMAN	312,725.47	04/01/1991	05/23/2011
WDL-89-3125	CST	BOZEMAN CITY OF	585,679.23	05/23/1989	05/23/2009
WDL-87-4395	CST	BROADWATER POWER PROJECT	21,735,000.00	11/05/1987	11/05/2007
WDL-87-4395	CST	BROADWATER POWER PROJECT	3,800,000.00	11/05/1987	11/05/2007
WDL-86-3053	CST	CHARLO WATER DISTRICT	22,969.25	12/04/1985	12/04/2005
WDL-93-3165	CST	COLUMBIA FALLS CITY OF	1,128,377.17	12/31/1993	12/31/2013
WDL-85-3010	CST	CONRAD	176,458.99	10/29/1984	10/29/2004
WDL-85-3029	CST	CULBERTSON CITY OF	470,305.59	07/01/1985	07/01/2005
WDL-88-3096	CST	DENTON CITY OF	147,430.23	08/31/1987	09/01/2007
WDL-93-3162	CST	DUTTON TOWN OF	138,580.94	09/15/1992	06/08/2012
WDL-93-3162A	CST	DUTTON TOWN OF	23,740.17	09/15/1992	06/08/2012
WDL-85-3048	CST	EAST BENCH IRRIGATION DISTRICT	642,364.86	06/29/1987	07/02/2017
WDL-88-3104	CST	EAST HELENA	348,669.49	02/02/1988	02/02/2008
WDL-87-3079	CST	EKALAKA	148,327.78	08/15/1986	08/15/2006
WDL-85-3014	CST	ENNIS CITY OF	126,221.81	11/30/1984	11/30/2004
WDL-91-3147	CST	FAIRVIEW CITY OF	228,519.36	11/26/1990	07/01/2010
WDL-93-3163	CST	FLATHEAD COUNTY COMMISSION	3,910,913.48	12/31/1992	07/05/2013
WDL-93-3174	CST	FORSYTH CITY OF	391,311.73	11/01/1993	05/14/2013
WDL-86-3054	CST	FORT BENTON CITY OF	550,312.11	12/30/1985	12/30/2005
WDL-90-3134	CST	GARDINER PARK CO WATER DIST	305,483.64	10/31/1989	07/01/2009
WDL-88-3097	CST	GLASGOW CITY OF	2,544,375.47	10/02/1987	07/01/2007
WDL-91-3146	CST	GLENDIVE CITY OF	1,532,085.46	03/14/1991	01/01/2011
WDL-88-3108	CST	HARLEM CITY OF	318,148.34	05/08/1988	05/01/2008
WDL-86-3051	CST	HAVRE CITY OF	1,896,119.46	12/02/1987	12/02/2005
WDL-87-3086	CST	LAKESIDE COUNTY SEWER DISTRICT	60,778.10	03/20/1987	03/01/2007
WDL-87-3091	CST	LAKESIDE COUNTY SEWER DISTRICT	606,587.89	07/07/1987	03/01/2007
WDL-85-3013	CST	LIBBY CITY OF	413,472.07	12/03/1984	01/03/2005
WDL-88-3103	CST	LIMA	197,301.26	01/25/1988	02/01/2008
WDL-87-3087	CST	LOCKWOOD IRRIGATION DISTRICT	192,518.53	03/26/1987	07/01/2007
WDL-90-3138	CST	MILES CITY	1,350,393.74	05/21/1990	06/01/2010
WDL-89-3114	CST	MILL CRK WATER AND SEWER DIST	830,322.13	10/14/1988	07/15/2020
WDL-94-3176	CST	PONDERA CO CANAL & RESERVOIR	383,766.95	12/09/2013	12/09/2013
WDL-89-3117	CST	PONDERA CONSERVATION DIST	514,475.89	01/11/1989	07/01/1990
WDL-86-3052	CST	POPLAR CITY OF	339,385.05	11/12/1985	11/12/2005
WDL-85-3016	CST	POWER TETON CO WATER/SEWER	41,286.15	01/30/1985	01/30/2005
WDL-85-3017	CST	SAGE CREEK CO WATER DISTRICT	539,442.19	01/31/1985	01/31/2015
WDL-90-3145	CST	SANDERS CO WATER DIST: NOXON	128,786.03	06/14/1990	06/15/2010
WDL-85-3011	CST	SHELBY CITY OF	401,783.52	11/02/1984	11/02/2004
WDL-87-3078	CST	SHIELDS CANAL WATER USERS ASC	24,119.39	06/01/1986	12/15/2006
WDL-91-3148	CST	SUN PRAIRIE SEWER DISTRICT	507,749.61	10/15/1990	07/01/2010
WDL-93-3173	CST	SUN PRAIRIE VLG CO WATER/SEWER	194,555.50	05/06/2013	05/06/2013
WDL-85-3044A	CST	THREE FORKS CITY OF	196,663.90	01/14/1986	01/14/2006

WDL-85-3044B	CST	THREE FORKS CITY OF	124,473.93	01/14/1986	07/14/2006
WDL-85-3047	CST	UPPER MUSSELSHELL WATER USERS	156,517.69	06/12/1985	12/01/2005
WDL-88-3101	CST	WEST YELLOWSTONE CITY OF	419,859.02	12/30/1987	07/01/2007
WDL-89-3127	CST	WEST YELLOWSTONE CITY OF	592,903.26	06/30/1989	01/01/2009
WDL-87-3084	CST	WHITE SULPHUR SPRINGS, CITY OF	311,734.43	03/02/1987	03/02/2007
WDL-93-3175	CST	WHITEFISH CITY OF	483,100.90	05/01/2013	05/01/2013
WDL-87-3093	CST	WHITEHALL CITY OF	101,726.49	11/09/1987	11/01/2007
WDL-91-3152	CST	WIBAUX	233,579.26	06/25/1991	07/01/2011
WDL-86-3067	CST	YELLOW WATER/ USERS ASSOC	23,072.81	10/11/1985	07/01/2005
WDL-86-3060	CST	YELLOWSTONE COUNTY	291,484.76	03/13/1986	03/14/2006
WDL-86-3066	CST	YELLOWSTONE COUNTY	346,105.68	03/13/1986	03/14/2006
		Total:	**55,845,627.38**		

ID Number	Type	Applicant	Balance Due	Closing	Termination
WDGL-85-8005	GO	ANTELOPE CO WATER/SEWER DIST	74,652.48	01/03/1986	01/10/2016
WDL-85-3030	GO	CULBERTSON CITY OF	71,457.48	07/01/1985	07/01/2005
WDGL-85-8006	GO	HAMILTON, CITY OF	74,409.58	12/08/1986	03/01/2006
WDGL-84-8004	GO	WINNETT TOWN OF	66,799.35	05/30/1984	05/30/2004
		Total:	**287,318.89**		

ID Number	Type	Applicant	Balance Due	Closing	Termination
WDL-89-3128	RRD	CUT BANK N GLACIER W/S DIST	76,598.96	09/28/1990	06/07/2010
WDGL-85-8006	RRD	HAMILTON	18,294.76	12/08/1986	03/01/2006
WDL-87-3082	RRD	KEVIN TOWN OF	133,038.45	11/10/1986	11/10/2006
WDL-88-3100	RRD	LAKESIDE WATER DISTRICT	83,081.33	07/27/1988	07/01/2008
WDL-87-3083	RRD	PARK COUNTY RSID #7	121,922.18	12/22/1986	12/22/2006
		Total:	**432,935.68**		

LOANS AUTHORIZED IN 1993 AND SEEKING REAUTHORIZATION

COAL SEVERANCE TAX LOANS -- H.B. 12

DNRC - North Fork of the Smith - Dam Rehabilitation	**4.5% for 20 yrs**	**1,393,467**
Dodson Irrigation District-Water Use Efficiency	**Market Rate**	**31,326**
East Glacier Water and Sewer District-Midvale Diversion	**Market Rate**	**76,537**
Ennis, Town of - Water System Improvements	**1% below 1st 5 yrs**	**1,100,000**
Forsyth, Town of - Sewer System Improvements	**2% below 1st 5 yrs**	**1,138,916**
Fort Shaw Irrigation District - Irrigation Improvements	**Market Rate**	**50,000**
Glendive, City of - Sewer System Improvements	**2% below 1st 5 yrs**	**2,240,762**
Hilger Water and Sewer District-Sewer System Improvements	**Market Rate**	**50,000**
Hill County - Salinity Control	**Market Rate**	**50,000**
Huntley Project Irrigation District- Rehabilitation	**3.5% for 20 yrs**	**4,875,440**
Huntley Water and Sewer District-Water System Improvements	**Market Rate**	**50,000**
Mill Creek Water District, Gravity Irrigation System	**At 6% for 30 yrs**	**151,000**
Neihart, Town of - Water System Improvements	**Market Rate**	**150,000**
Ryegate, Town of -Water System Improvements	**Market Rate**	**150,000**
Seeley Lake - Water System Improvements	**2% below 1st 5 yrs**	**922,150**
Tin Cup Water Company - Dam Rehabilitation	**4.5% for 20 yrs**	**304,204**
Whitefish - Water System Improvements	**2% below 1st 5 yrs**	**5,035,800**
Total CST Loans Authorized and Reauthorized in H.B. 12		**17,769,602**

LOANS AUTHORIZED IN 1993 THAT HAVE BEEN CANCELLED

Butte-Silver Bow Compost Pilot Project	49,864
Malta Irrigation District-Water Use Efficiency Improvements	50,000
West Shore Sewer District/Flathead County RSID	800,000
Lakeside Water and Sewer District	251,700
Carbon County-Roberts Water System Improvements	100,000
Chinook Irrigation Association – Measuring Devices	65,683
Chinook Irrigation Association – Lohman Dam	63,827
Flathead Joint Board of Control – Fish Freindly	54,500
Glasgow Irrigation District- Efficiency Improvements	50,000
Town of Chinook	200,000
Town of Winnett-Sewer System Improvements	50,000
Town of Ekalaka-Water System Improvements	210,000
Town of Fairfield	14,169
Meagher County Conservation District	62,500
Town of Belt-Sewer System Improvements	100,000
Stockett Sewer District-Sewer System Improvements	150,000

Montana Department of
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